DOCUMENT RESUME

ED 466 788 CS 511 225

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TITLE	Adolescent Literacy Resources: Linking Research and Practice.
INSTITUTION	Northeast and Islands Regional Educational Lab. at Brown Univ., Providence, RI.; Center for Resource Management, Hampton, NH.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	2002-00-00
NOTE	133p.; Produced with Nancy Cook Smith and Holly Clark.
CONTRACT	ED-01-CO-0010
AVAILABLE FROM	LAB at Brown University, The Education Alliance, 222 Richmond St., Ste. 300, Providence, RI 02903-4226. Tel: 800-521-9550 (Toll Free); Fax: 401-421-7650; e-mail: lab@brown.edu; Web site: http://www.lab.brown.edu.
PUB TYPE	Guides - Non-Classroom (055) -- Information Analyses (070) -- Reference Materials - Bibliographies (131)
EDRS PRICE	EDRS Price MF01/PC06 Plus Postage.
DESCRIPTORS	*Adolescents; *Content Area Reading; *Content Area Writing; *Educational Practices; *Literacy; Literature Reviews; Middle Schools; Secondary Education; Student Motivation
IDENTIFIERS	Implications; *Research Summaries

ABSTRACT

Secondary school educators too often find that their students do not have the necessary literacy skills to use reading and writing effectively to learn subject matter. For middle and high school educators searching for ways to promote literacy, this book bridges the divide between what the research says works in literacy and what is happening in most of today's content-area classrooms. The book reviews relevant research from the past 20 years and describes the implications for classroom practice. The first section of the book provides an overview of the issues related to ongoing adolescent literacy support and development, followed by an introduction to the Adolescent Literacy Support Framework. Each of the next four sections are devoted to one of the Key Components of the Framework. Each section contains a summary of the research for that Key Component, followed by annotated reviews of resources that provide insights into the implications of the research and illustrate implementation of research-based practices. Lastly, the extensive bibliography includes all of the citations found in the book as well as many more studies and resources of value to educators interested in learning more. The book is divided into the following sections: Introduction; The Adolescent Literacy Support Framework; Overview of Key Component A: Address Student Motivation to Read and Write; Overview of Key Component B: Implement Research-Based Literacy Strategies for Teaching and Learning; Overview of Key Component C: Integrate Reading and Writing across the Curriculum; and Overview of Key Component D: Ensure Support, Sustainability, and Focus through Organizational Structures and Leadership Capacity. (NKA)

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by Julie Meltzer
with Nancy Cook Smith
and Holly Clark

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The Center for Resource Management, Inc., based in South Hampton, New Hampshire, is a LAB Partner.

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This publication is based on work supported by the Office of Educational Research and Improvement (OERI), U.S. Department of Education, under Contract Number ED-01-CO-0010. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of OERI, the U.S. Department of Education, or any other agency of the U.S. Government.

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INTRODUCTION

For middle and high school educators searching for ways to promote literacy, *Adolescent Literacy Resources: Linking Research and Practice* bridges the divide between what the research says works and what is happening in the most of today's content-area classrooms. Secondary school educators too often find that their students do not have the necessary literacy skills to use reading and writing effectively to learn subject matter. Educators know that something needs to be done but, understandably, are daunted by the considerable task of identifying and applying research-based literacy strategies. This book organizes the research and links it to effective classroom practice to help educators focus their efforts in this critical area.

The problem looms large in this era of standards-based reform, one that calls upon educators to ensure that all students achieve to high standards. Over the last two years, a proliferation of resources and workshops has inundated educators with recommended practices to put into place in the classroom. However, because the lists of strategies are overly specialized, too generic, or miscellaneous, many teachers do not see how to integrate these strategies into their content-area instruction. Although the research base is solid, the research is scattered across many different fields of inquiry and is not easily accessible to busy teachers and administrators. In addition, educators are responding to the challenges imposed by a host of educational reform initiatives fueled by high-stakes accountability. Under pressure and dedicated to student achievement, secondary school educators know that literacy is a priority, but they are often at a loss as to how to address it systemically within their school or district.

Adolescent Literacy Resources: Linking Research and Practice reviews relevant research from the past 20 years and describes the implications for classroom practice. This book keys a series of annotated research reviews to the Adolescent Literacy Support Framework. The Framework defines the elements of a successful literacy initiative and connects the research to best practices. Educators can use the Framework and the related research to assess what kinds of literacy support they have in place and what they need to put into practice.

This compendium of resources — an extensive bibliography, annotated research reviews, and examples of classroom practice, all within the context of a framework for implementing a school-wide literacy initiative — will help educators identify effective literacy strategies suited to their particular needs. Using this book as a starting point, educators can evaluate their practices, refine their teaching methods, and guide school-wide literacy initiatives designed to improve academic achievement in the content areas.

How This Book Is Organized

The first section of the book provides an overview of the issues related to ongoing adolescent literacy support and development, followed by an introduction to the Adolescent Literacy Support Framework. Each of the next four sections are devoted to one of the Key Components of the Framework. Each section contains a summary of the research for that Key Component, followed by annotated reviews of resources that provide insights into the implications of the research and illustrate implementation of research-based practices. Lastly, the extensive bibliography includes all of the citations found in the book as well as many more studies and resources of value to educators interested in learning more. The goal is to consolidate the wide range of research that undergirds the Adolescent Literacy Support Framework.

The annotated reviews underscore important ideas to consider when designing and implementing programs to improve adolescent literacy. The reviews are clustered in particular sections to help develop a robust understanding of each Key Component. Within each section, the reviews are presented in alphabetical order by author. Related reviews that appear in full elsewhere in the book are noted at the end of the summary for each Key Component.

Each review contains an overview, followed by a discussion of the implications suggested by the work. To help readers study various implications on practice, these discussions are organized into the following headings:

- ● Instructional Implications
- ✦ Curricular/Program Implications
- ▲ Structural/Systemic Implications
- ■ Professional Development Implications
- ◆ Assessment Implications

The intent is for readers to identify recurring themes, use multiple lenses through which to look at their own work, and gain an understanding of strategies and resources applicable to their settings.

It is important to note that a theoretical framework, such as the Adolescent Literacy Support Framework, artificially separates components that might naturally occur together. This allows for easier examination of a complex phenomenon. However, since most of the annotated reviews represent syntheses of effective practice, they necessarily illustrate more than one Key Component of the Framework. Together, the reviews present a summary of the essential issues in adolescent literacy within the context of standards-based education reform.

How to Use This Book

Practitioners can use this book to focus discussions between teachers and administrators. A group of practitioners can read and discuss each section, or each person can volunteer to read a different review and then share his/her insights with the group. After reading the summary and reviews associated with a particular Key Component of the Adolescent Literacy Framework, educators can connect salient points to issues within their particular setting. To address these issues, the group can develop a set of research-based recommendations and share them with

their colleagues at school. Based on these recommendations, educators can develop an action plan for improving literacy development at their school.

Preservice and in-service educators can use the book to gain an overview of the major issues in adolescent literacy. In addition to foundation principles, the book provides multiple examples of the classroom environments, materials, and practices that have been proven effective.

Teacher study groups or action research teams can use the book to support their collective inquiry. Study groups can use the annotated reviews to select resources for further exploration. One approach is to read a single review that presents a summary of a theoretical framework and discuss classroom practices in light of that framework. Another is to select a cluster of reviews as a springboard for discussion of classroom practices. Action research teams can survey a series of instructional implications across reviews to formulate areas of inquiry for action research. They can also explore selected reviews to broaden their perspectives in the field. The reviews can help teams to identify and obtain valuable books and other resources that apply to their work.

School improvement teams, professional development committees, and curriculum committees can compare the implications for practice across the annotated reviews to ensure that their plans address the crucial issues. Because literacy is sometimes overlooked due to the departmental organization of many middle and high schools, this book can serve as an important means for uniting those working on educational reform in a particular district or school.

Educational leaders can suggest that teachers read particular summaries or reviews. Because asking all teachers to read lengthy volumes is often unrealistic, discussing the implications of a summary or review can be an effective and efficient way to raise critical issues. This process can guide educational leaders to a resource that meets a current need, and they can share that book or article with staff.

Parents, school board members, and support personnel can use the book to gain insight into issues in adolescent literacy. This book can also offer useful information to grant writers seeking funding for adolescent literacy projects.

All readers are encouraged to use the book in conjunction with the Adolescent Literacy in the Content Areas Spotlight on The Knowledge Loom Web site (http://knowledgeloom.org). The Knowledge Loom Web site, developed by the LAB, is a database of resources on best practices that describe what works in teaching and learning. The spotlight is a collection of information on adolescent literacy in the content areas.

How the Research Was Selected

The resources included in this book

- Provide an overview of adolescent literacy-related research,
- Showcase the solid research base in this area, and
- Present the resulting implications for classroom practice.

The resources were selected on the basis of the relevance of the research findings to those involved in creating adolescent literacy initiatives, including: teachers, administrators, professional developers, teacher educators, technical assistance providers, and researchers.

The annotated reviews are keyed to the Adolescent Literacy Support Framework, itself a research synthesis that assists educators to better understand the issues involved in ongoing adolescent literacy development and support.

The four Key Components of the Framework are:

A. Address Student Motivation to Read and Write
B. Implement Research-Based Literacy Strategies for Teaching and Learning
C. Integrate Reading and Writing Across the Curriculum
D. Ensure Support, Sustainability, and Focus Through Organizational Structures and Leadership Capacity

The selected resources address the following issues relative to adolescent learners:

- the social/motivational issues inherent in reading and reading instruction
- the cognitive/metacognitive strategies used by proficient readers and how best to develop these strategies to support weaker readers
- the issues involved in reading in the content areas and the use of reading and writing to learn

These issues overlap, but all three must be taken into consideration in order for systemic intervention and support initiatives to be effective. In addition, these issues permeate all Key Components of the Adolescent Literacy Support Framework (described fully in the next section).

A Word About Literacy Research

Linking research and practice is essential to improving classroom practice. The whirlwind of daily teaching and learning in schools does not generally lend itself to probing issues in-depth. Through research, it is possible to examine an issue intensely and systematically, resulting in a deeper understanding. Research generates insights, theoretical frameworks, and solid information upon which educators can base their reflections and changes in practice.

Making decisions using sound research is a better starting place than randomly trying new approaches, investing precious resources in them, and hoping they will be effective. Because the current charge is to support all learners to meet the demands of challenging standards, educators need as much information as possible about what works. Even with that information, however, educators need time and support to implement what the research suggests as effective. Applying

new knowledge to a familiar classroom environment can be daunting. Professional development programs that address these challenges can assist educators in connecting the research to their practice.

Of course, "the research" is not monolithic, either in how it is conducted or in what it suggests. Researchers in various academic fields view literacy itself quite differently. Furthermore, the understanding of reading comprehension has shifted substantively over the past 25 years. Researchers have explored behavioral, cognitive, and, more recently, sociocultural theories of reading. It is important to note, however, that for more than a decade, research in the area of adolescent literacy shows constancy in the findings despite the diversity of approaches and theoretical premises.

This book presents several different types of research. They include: reviews of resources representing classroom-based action research (Krogness, 1995; Wilhelm, 1995); meta-analyses of many studies relative to a particular strategy (Rosenshine, Meister, & Chapman, 1996; Rosenshine & Meister, 1994); theoretical frameworks based on a body of research (Guthrie, 2001; Schoenbach, Greenleaf, Cziko, and Hurwitz, 1999); reviews of research (Alvermann & Moore, 1991; Weinstein & Mayer, 1986); sets of strategies and approaches along with the research upon which they are based (Alvermann & Phelps, 1998; Buehl, 2001; Moore, Alvermann, & Hinchman, 2000); and single large-scale research studies (Davidson & Koppenhaver, 1993; Langer, 1999a). In addition, while developing the Adolescent Literacy Support Framework, the author examined reports on individual case studies, quasi-experimental studies, position papers, and qualitative studies.

The research consistently reinforces several points about effective adolescent literacy development:

- the role of engagement and motivation in literacy development
- the requirement that students be actively involved in making meaning from text
- the interconnectedness of reading, writing, speaking, listening, and thinking
- the need to integrate both generic and discipline-specific literacy strategies throughout the content areas in order to maximize learning

This astounding consensus is important to note as both an indication and confirmation of core concepts. While reading the reviews, the congruence of various implications may seem repetitive. Think of these as melody lines continuing from one resource to another. They indicate where to pay particular attention and how to connect resonant themes to teaching practices and learning environments.

WHY IS THIS SO COMPLICATED?

DEFINING THE ADOLESCENT LITERACY CONUNDRUM

A Definition of Literacy

Literacy — the ability to read, write, speak, listen, and think effectively — enables adolescents to learn and to communicate clearly about what they know and what they want to know. Being literate enables people to access power through the ability to become informed, to inform others, and to make informed decisions. As Thomas Jefferson said over two centuries ago, a literate populace is essential to preserving a functioning democracy. Increasingly sophisticated levels of literacy are required to negotiate the world as one matures. Because literacy is fundamental to teaching and learning, support for literacy development at the secondary level is key to students' success in the classroom and beyond. It is particularly critical now.

Defining the Problem

The literacy demands that adolescents will face as twenty-first-century workers and citizens will far exceed what has been required in the past (Moore, Bean, Birdyshaw, & Rycik, 1999). Yet multiple indicators (the 1998 National Assessment of Educational Progress (NAEP) assessment, results of standards-based assessments, complaints from employers, and scores on standardized tests) overwhelmingly suggest that the majority of American high school students do not have the reading and writing skills necessary to maximize content-area learning nor to successfully negotiate the Information Age economy facing them.

What kinds of literacy skills do adolescents need? After all, most high school graduates can do basic reading and writing. Basic skills, many argue, are no longer sufficient. What is needed is what Langer terms "high literacy."

> While basic reading and writing skills are included in this definition of high literacy, also included are the ability to use language, content, and reasoning in ways that are appropriate for particular situations and disciplines. Students learn to 'read' the social meanings, the rules and structures, and the linguistic and cognitive routines to make things work in the real world of English language use, and that knowledge becomes available as options when students confront new situations. This notion of high literacy refers to understanding how reading, writing, language, content, and social appropriateness work together and using this knowledge in effective ways. It is reflected in students' ability to engage in thoughtful reading, writing, and discussion about content in the classroom, to put their knowledge and skills to use in new situations, and to perform well on reading and writing assessments including high stakes testing. (Langer, 1999a)

Yet the research shows that middle and high schools are not helping those who have basic reading and writing skills to reach this necessary high level of literacy. More than 23% of students at the 12th-grade level demonstrate only "partial knowledge and skills" that are deemed fundamental for their grade level (Peterson, et al., 2000).

The situation is further complicated by the range of English skills that students demonstrate in each classroom. An unprecedented number of students are entering middle and high schools with limited English skills and widely varying literacy backgrounds in their native language. The percentage of students coming from impoverished literacy backgrounds* is growing at an astounding rate. Predictions are that by 2020 students from cultural and language minority groups will form the majority of the population in American schools. In more than 20 urban school districts across the country, they already do (National Center for Educational Statistics).

English language learners, along with native English speakers from low-income populations, are failing in disproportionate numbers to demonstrate "basic proficiency" in reading at the 12th-grade level. If the failure trends continue, our democratic society is at serious risk. A majority of our citizens will not have the literacy skills to participate fully and will not be able to claim their rights and fulfill their responsibilities. The consequences on them and on society will be enormous and negative. "For secondary level students in grades 7 through 12, the social and economic consequences of not reading well can be cumulative and profound: the failure to attain a high school diploma, a barrier to higher education, underemployment or unemployment, and difficulty in managing personal and family life" (Peterson, C.L., Caverly, D.C., Nicholson, S.A., O'Neal, S., & Cusenbary, S., 2000).

Moreover, the infusion of technology into our communication systems worldwide brings with it the need to better understand how technology changes and extends literacy demands for all students (Luke & Elkins, 1998; Rycik & Irvin, 2001; Leu, 2000). Adolescents face a world filled with new types of information systems; new modes of communication, presentation, and publication; and wide access to technologies that support new ways of managing, analyzing, developing, and monitoring information. At the secondary level, many students are familiar with these capabilities, while others are not. Many teachers are not technologically literate, many schools still have limited or unreliable technological capacity, and most educational systems are not adequately preparing students to develop the types and levels of literacy necessary to truly capitalize upon technology-enhanced teaching and learning. Even those schools that are successfully fostering high literacy tend not to include exploration of hypertext; technology-based reading, writing, and learning; and computer-enhanced reporting formats, considering all these as "above and beyond." And yet, most teenagers and adult workers increasingly use these valuable, technology-based communication tools.

**Author's Note: Research indicates the richness of the verbal and written literacy of various cultural and language minority groups. However, those who are isolated from, and not literate in, the languages of power in a given society come from an impoverished literacy background because their cultural languages, however enriching, do not enable them to negotiate on equal footing with those who control access to resources in that larger society. If people are not fluent in the languages of power particular to American society (for example, standard English, argument and debate, logical thinking, and case making), they are less able to gain access to the privileges, rights, and responsibilities of citizenship in America's democratic society. Adequate literacy enables people to communicate and interact effectively with multiple cultural groups in society, as well as in school.*

What We Know

Research in this important area suggests the direction that improvement efforts must take. We know many ways to reach reluctant readers and writers. To engage students, we must help them see connections between their lives and their work in school. We must create responsive and inclusive learning environments that offer a choice of texts, opportunities for lively discussion, and many pathways for engagement (Collins, 1996; McCombs & Barton, 1998). We know a variety of effective teaching and learning strategies that develop students' aptitude as readers and writers (Alvermann & Moore, 1991; Langer, 1999a; Peterson, et al., 2000). Some of the best practices are teacher modeling, direct teaching of literacy skills in context, frequent assessment, focusing on higher-order thinking, and student collaboration. To meet the needs of weaker readers and second language learners, we know that we must focus on explicitly teaching vocabulary, text structures, and discourse features of various disciplines (Allen, 1999; Alvermann & Phelps, 1998; Peterson, et al., 2000). We know that enhancing literacy skills will improve learning in the content areas. We know that the success of any secondary school reform initiative depends on leadership, vision, ongoing professional development, and the strategic use of resources — time, people, space, and materials (e.g., CSRD, Breaking Ranks, Coalition of Essential Schools).

Despite what we know, there is a large breach between research and practice — and a marked reluctance on the part of many middle and high schools to focus on literacy support at the district, school, or even departmental level. And, therefore, despite the urgency, there is limited understanding of how to bring these effective literacy strategies to life in the content-area classroom in ways that will make a positive difference for students (NRP Report, 2000).

The Need for Secondary Literacy Support

Literacy support, where it exists, is primarily limited to remedial programs. Many secondary school educators hold the false conception that if literacy is adequately addressed in elementary school, there will be no need to address literacy in the middle and high schools. They tend to hope that the crisis, while evident at the moment, might "go away" if elementary schools do their job (teach kids to read and write).

In one respect, it is true that if literacy efforts help students leave the primary grades with adequate reading and writing skills, then fewer students at the secondary grades will need intensive support for basic writing conventions and decoding skills. However, this certainly will not eliminate the need for an extensive and effective focus on literacy at the secondary level.

Continuous literacy support is required for three major reasons:

1. Lack of effective remediation services at many middle and high schools
2. Increased literacy demands inherent in content-based standards
3. Increased numbers of English language learners at the middle and high school levels

One reason for the lack of effective remediation services at many middle and high schools is that "over the last decade, researchers and policymakers have all but abandoned attention to secondary remediation to focus on preventing the need for it" (Peterson, et al., 2000). Decreased remediation

services have left many students at a real disadvantage, especially those with mild learning disabilities, those whose culture differs from the culture of the classroom, and those who have become skilled evaders of reading. These students may not have developed basic writing conventions and decoding skills. In many cases, they lack the ability to understand more complex texts and are not fluent readers and writers. As a result, these students will need continuous literacy support to be successful in middle and high schools.

At the secondary school level, reading comprehension skills must become increasingly sophisticated to address the demands posed by more challenging academic expectations. "Beyond the primary grades, students need to grapple with texts that are expository, dense, and full of new, more difficult vocabulary, especially in math, science, and social studies" (Allen, 2000). The ability to transact meaning from the academic text of different disciplines is often not directly taught, with the consequence of failure to comprehend those academic topics. For example, if students cannot understand a scientific argument, then they cannot understand the science that they are trying to learn. If students cannot understand how history is presented, they cannot understand the points that are being made or connect those to what is happening in the present. If these literacy skills are not fluent due to lack of practice and inappropriate instruction, all but the most advanced readers and writers are placed at a disadvantage.

Additionally, effective literacy support is key to the success of second language learners. The standards movement asserts that all students should understand content at deeper, more complex levels than have been advocated previously. The demands inherent in meeting the content-area standards involve substantial literacy skills. For students to construct meaning and derive usefulness from what they learn, they must be able to retain important information, understand topics and concepts deeply, and actively apply knowledge (Perkins, 1992). Reading and writing play a crucial role in the ability to "learn for understanding" (Graves, 1999; Graves, 2000). Deep understanding of content is almost impossible to achieve when literacy skills are too weak to support this kind of learning. For all of these reasons, it is imperative that middle and high schools establish effective, widespread literacy support.

Why IT IS NOT Happening in Most Middle and High Schools

In most middle and high schools, several barriers impede the effort to build effective literacy support into the daily educational experience of adolescent learners. These obstacles are related to a complex array of factors: belief systems on the part of secondary school educators, inadequate professional development, organizational and structural impediments, lack of understanding about what needs to be done, lack of focus, and unwillingness to make the changes necessary to support adolescent literacy development (O'Brien, Stewart, & Moje, 1995).

It is important to recognize that teaching reading comprehension strategies to students at all grade levels is complex. An additional challenge is the assumption that secondary school teachers should focus on teaching content while elementary school teachers should teach reading. Overwhelmed by higher content standards, many middle and high school teachers feel under pressure to "cover" more content than ever before and are resistant to "adding" literacy responsibilities to their crowded course calendars.

Teacher education mandates in some states require that secondary school teachers have taken at least one three- to four-credit course in content-area reading. However, given the current average age of teachers, this was too little too long ago. Other states do not require any content-area reading courses as part of their secondary school level certification. As a result, many teachers lack the expertise to teach reading. They end up planning content instruction so that it minimizes reading and writing instruction (Allen, 2000; Cziko, 1998). Without the key support and practice opportunities needed to strengthen skills, students end up reading and writing less.

Department structures in many middle and high schools further exacerbate the issue. Since literacy is not "visible" as a content area, it is not "owned" by any specific department. The English department, it is wrongly assumed, "takes care of that." Yet most English teachers have as little training in teaching reading as their colleagues — making their work even more frustrating as they attempt to teach literature to students who are weak readers.

To address these issues, secondary schools must provide teachers with effective ongoing professional development to learn effective research-based strategies and infuse them into content-area instruction. Furthermore, professional development must assist teachers in understanding the literacy demands inherent in their specific disciplines and how they can best support students to gain deeper content understanding. This type of collaborative, reflective professional development must also include attention to the issues in cultural and learning differences, motivation and engagement, and technological influences on literacy. Teachers, administrators, and students must make a commitment to high literacy development and support.

Administrators must become aware of the issues involved in adolescent literacy development. They need to know what the research says, what promising programs and approaches exist, and what kinds of leadership capacities and organizational structures are required to carry out an initiative that will make a difference for students. Districts must make a commitment to sustaining adolescent literacy programming for the long-term.

What Effective Literacy Support Looks Like

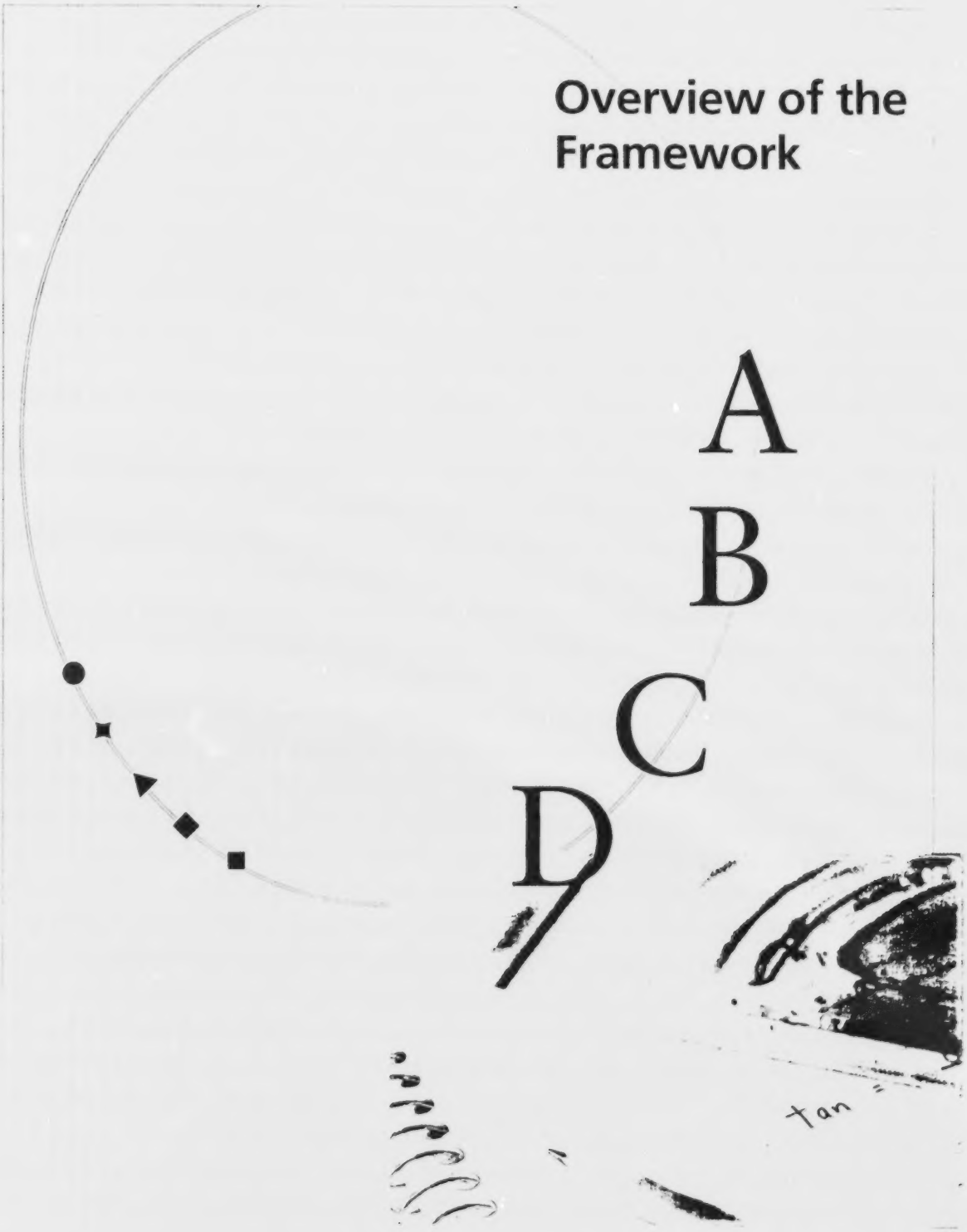
Many of the resources reviewed in this book provide detailed views of what effective literacy support looks like in middle and high schools. Readers will find specific content-area examples throughout the reviews and in the books and articles themselves. Some common elements are portrayed below:

> When you walk into a secondary school that is truly focused on developing high literacy, you see students everywhere engaged in reading, writing, and animated discussion. You encounter a high level of interaction between the students and the teachers, among the teachers themselves, and among the students. You see teachers and students using writing for communication, reading a wide variety of books, and constantly using computers for projects. Posted on the walls, in the student paper, and on electronic bulletin boards are editorials, petitions, letters, and posters written by teachers and students to communicate messages important to the school community. In classrooms, you see video or dramatic interpretations, presentations, and audience critiques of presentations. These projects are occurring

> all the time, not just as special or one-time occasions. Reading, writing, speaking, and listening are the lifeblood of the school, through which students and teachers explore all manner of content, and everyone is engaged in the learning process.

If this picture describes your middle or high school, feel affirmed that best practices to support literacy development are in place and use this book to bolster your programs. Consider sharing your knowledge with others by contributing to The Knowledge Loom Web site, a database of best practices that describe what works in teaching and learning. If not, use this book to begin analyzing your current programs and designing an adolescent literacy initiative. Explore the Adolescent Literacy Support Framework, the research summaries, the annotated reviews, and the resources listed in the bibliography. These resources provide guidance for supporting ongoing adolescent literacy development, which in turn will help prepare students to become active, productive citizens of the twenty-first century.

Overview of the Framework



OVERVIEW OF THE ADOLESCENT LITERACY SUPPORT FRAMEWORK

To assist teachers and administrators in developing a cohesive approach to the issue, the Center for Resource Management (CRM), a partner organization of the LAB at Brown, developed the Adolescent Literacy Support Framework. Drawing from a number of fields, including cognitive psychology, linguistics, education, English language arts, second language acquisition, and reading, the author distilled core concepts into the Adolescent Literacy Support Framework. The Framework provides a comprehensive overview of what needs to be addressed to effectively support adolescent literacy development and identifies four Key Components of a successful initiative. By putting into practice all four Key Components, middle and high schools can meet the literacy needs of a wide variety of learners.

These Key Components are:

A. Address Student Motivation to Read and Write
B. Implement Research-Based Literacy Strategies for Teaching and Learning
C. Integrate Reading and Writing Across the Curriculum
D. Ensure Support, Sustainability, and Focus Through Organizational Structures and Leadership Capacity

Below is a quick summary of each Key Component. A more detailed research synthesis introduces each of the following four sections of this book. Through reading the research syntheses and associated reviews, readers can develop a deep understanding of each Key Component of the Framework.

A Key Component A: *Address Student Motivation to Read and Write*

According to current research, school and classroom cultures play a strong role in either supporting or undermining the development of positive literacy identities in adolescents (McCombs & Barton, 1998). Students who have experienced repeated failure at reading are often unwilling to participate as readers or writers. On the other hand, students become engaged readers when school and classroom cultures successfully promote the development of adolescent literacy skills. These cultures are characterized by connections, interaction, and responsiveness, which lead to student engagement and reflection (Collins, 1996; Davidson & Koppenhaver, 1993; Krogness, 1995; Moore, et al., 2000; Schunk & Zimmerman, 1997; Wilhelm, 1995). Key Component A of the Framework shows how to connect reading and writing to the social and emotional needs of adolescents.

Best Practices

- Making connections to students' lives
- Having students interact with each other and with text
- Creating responsive classrooms

B Key Component B:
Implement Research-Based Literacy Strategies for Teaching and Learning

A growing body of research about the differences in the metacognitive skills of good versus poor readers is providing a foundation for identifying promising reading comprehension strategies for adolescent learners (Duke & Pearson, in press). Students "must learn to think about the complexities of the reading process and then actively apply appropriate strategies" (Allen, 2000). They must, therefore, learn the literacy strategies, be given time to practice and apply them in a variety of contexts, and subsequently use them for learning in the content areas. The research suggests a menu of best practices for teaching adolescent literacy strategies. Component B of the Framework gives concrete examples of what these instructional practices look like in middle and high school classrooms.

Best Practices

- Teacher modeling, strategy instruction, and uses of multiple forms of assessment
- Emphasis on reading, writing, speaking, listening, and thinking
- Creating a student-centered classroom

C Key Component C:
Integrate Reading and Writing Across the Curriculum

Research clearly supports the use of a variety of comprehension strategies to enhance learning in the content areas. However, the literacy demands of different content areas, while sharing some similarities, vary substantially (Grossman & Stodolsky, 1995). Effective content-based vocabulary instruction, understanding of text structures, and discourse analysis all play key roles in assisting students to maximize content-area reading and writing to learn. Component C gives concrete examples of these practices in different curricular areas.

Best Practices

- Vocabulary development
- Understanding text structures
- Recognizing and analyzing discourse features
- Supporting the English, math, science, or social studies classroom through literacy development

D Key Component D:
Ensure Support, Sustainability, and Focus Through Organizational Structures and Leadership Capacity

Studies indicate that successful initiatives require a school-wide focus. Experience with educational reform models (e.g., Coalition of Essential Schools, Breaking Ranks, Career Academies) suggests that implementing and sustaining change in secondary schools requires a host of organizational and leadership structures specific to the ongoing initiative. Component D describes what these important capacities are and how they can shape the structure of the school.

Best Practices

- Meets the agreed-upon goals for adolescents in that particular community
- Articulates, communicates, and actualizes a vision of literacy as a priority
- Utilizes best practices in the area of systemic educational reform
- Is defined in a way that connects to the larger educational program
- Involves ongoing support for teacher professional development
- Has a clear process for program review and evaluation

Whose Needs Does the Framework Address

The Adolescent Literacy Support Framework is based on research on how to effectively support the vast majority of adolescent learners. The Framework includes best practices to support ongoing adolescent literacy development for English language learners, those from minority cultures and backgrounds, those who have become skilled evaders of reading and writing, those with only basic reading and writing skills, and those with advanced literacy skills. The best practices associated with each Key Component also address most of the issues associated with assisting special needs learners, including those with mild learning disabilities. However, the Framework does not include specific decoding and remediation strategies that may also be necessary to meet the needs of these students.

How to Apply the Framework

Perhaps the most important message of the research is that effective support of adolescent literacy development depends upon all of the Key Components being put into place concurrently. By addressing each Key Component and implementing the associated research-based best practices, educators can make a difference in the education for diverse learners in a deep, meaningful, and systemic way. The Framework is a starting place for understanding, designing, and instituting this complex, synergistic endeavor. It bridges the divide between research and practice.

In addition to this book, more information about the Adolescent Literacy Support Framework and related best practices can be found on The Knowledge Loom Web site's Adolescent Literacy in the Content Areas Spotlight (http://knowledgeloom.org).

Overview of Key Component A:

Address Student Motivation to Read and Write

Addressing Literacy-Related Social and Motivational Issues in the Middle and High School Classroom

When students are not motivated to read and write, they do not use those skills to learn. As a consequence of not practicing their reading and writing skills, students do not attain an adequate skill level necessary for sustaining higher-order thinking. This often leads to a cycle of failure. Moreover, when students do not feel comfortable with the identity of being a reader and writer and do not see the relevance of reading and writing to their success in society, they will not incorporate being a reader and writer into their personal identities. Many teachers say that the students will not or cannot read and write. Many students maintain that they do not choose to read and write. Fortunately, the research points a clear path to resolving the standoff.

Because research shows a direct connection between engagement and motivation, creating classrooms that center on student engagement is key to motivating students to develop positive literacy identities and strengthen literacy skills (Guthrie, 2001). Student-centered classrooms are environments where students feel a sense of belonging, competence, respect, and trust to make choices. (Collins,1996; McCombs & Barton,1998). Such an environment allows for: (1) the formation of meaningful adult and peer relationships; (2) dialogue, collaboration, and the expression of personal and collective views; and (3) acknowledgment and respect for unique abilities and talents (McCombs & Barton, 1998). Primary features of student-centered classrooms are connections, interactions, and responsiveness. To support literacy using this type of classroom, teachers need to know their students, how to teach reading and writing, and how to optimize the social and motivational needs of adolescents in service of content-area learning (Guthrie & Wigfield, 2000; McCombs & Barton, 1998; Moore, Alvermann, & Hinchman, 2000; Tierney & Pearson, 1981, 1992).

In student-centered classrooms, teachers constantly make connections between student's life experiences and texts, texts and films, texts and other texts, and previous school experiences and the topic at hand. Teachers expect students to make and share these connections in written and spoken communication, thereby fostering an inclusive climate for literacy development. Students actively question the texts they read, interactively explore content, and develop common understandings. Teachers and students regularly engage in discussion to better understand point of view. This interaction between text and experience is an important element of the teaching and learning process.

In this model, teachers are responsive to the adolescents' needs for choice and flexibility, while communicating clear expectations and encouraging higher achievement. To support this, the school provides a variety of materials and resources for teaching and learning. Teachers are also responsive to differing cultural perspectives, making it clear through their facilitation of discussion, choices of literature, structuring of assignments, and assessment strategies that students from all backgrounds are welcome, supported, and expected to participate. Throughout the school, the guiding philosophy is that engagement motivates learners who come from a cycle of failure in reading and writing. All of these conditions, in all of their dimensions, are essential to inviting and sustaining engagement.

Some instructional strategies used in this context are: the explicit teaching of general and content-specific literacy teaching and learning strategies; the use, where appropriate, of collaborative learning; frequent opportunities for reading, writing, speaking, and listening; teacher modeling and use of an apprenticeship framework; the use of multiple assessment tools and strategies; the

exploration of multiple points of view; the emphasis on literacy as a right; and the use of metacognitive strategies and higher-order thinking skills as a part of everyday teaching and learning (Langer, 1999a; McCombs & Barton, 1998; Tierney & Pearson, 1981, 1992).

Overview of Section

This section presents reviews of two kinds of resources. Some describe a theoretical framework within which to think about literacy-related social and motivational issues. Others offer classroom-based descriptions of how to motivate students to make connections, how to help teachers support meaningful interactions, and how to create a responsive classroom that promotes positive literacy identities.

Note: Related resources, reviewed in other sections, are listed below. (See the Table of Contents to find the full review.)

- *Content Reading and Literacy: Succeeding in Today's Diverse Classrooms*
- *Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms*
- *Beating the Odds: Teaching Middle and High School Students to Read and Write Well*

In addition, many excellent links to resources can be found in the Adolescent Literacy in the Content Areas Spotlight on The Knowledge Loom Web site (www.knowledgeloom.org).

Guthrie, J.T. (March, 2001). Contexts for Engagement and Motivation in Reading. Reading Online, 4(8). Available: http://www.readingonline.org/articles/art_index.asp?HREF=/articles/handbook/guthrie/index.html

Overview of Contents

Guthrie begins this article by defining what it means to be an engaged reader. According to Guthrie, engaged readers are "motivated, strategic, knowledgeable, and socially interactive." Extensive research shows that engagement is strongly related to reading achievement. Guthrie's research supports the existence of a strong affective component that combines with the synergistic cognitive, metacognitive, and interactive behaviors exhibited by enthusiastic and skilled readers. Findings suggest that engagement cancels the gap in reading achievement when socioeconomic status is factored in with reading scores. Therefore, the author feels it is important to understand what engaged readers do and which instructional contexts best support reading engagement.

This article offers a valuable summary of general research on motivation theory relevant to reading. Motivation to read involves a combination of a mastery orientation, a performance orientation, and self-efficacy. Social motivation can also play a key role in reading motivation. If students have a purpose for reading, have a task orientation, have confidence in their abilities as readers, and are in environments that encourage reading as a positive and socially acceptable activity, it is likely that they will become engaged readers. However, the chance of having all these conditions present at once is rare and decreases dramatically as students move into middle and high school.

The author presents a research-based "engagement model of reading development" that makes explicit the instructional contexts that come together "to foster engagement processes and reading outcomes."

The model promotes the following characteristics:

- learning and knowledge goals
- real-world interactions
- autonomy support (choice)
- interesting texts for instruction
- strategy instruction
- collaboration
- praise and rewards
- evaluation
- teacher involvement
- coherence of instructional processes

Guthrie notes, "While I believe that reading increases the occurrence of reading outcomes (e.g., achievement, knowledge, and practices), I also expect that positive outcomes increase engagement," — an expectation that is borne out by other research in the field. An extensive list of references accompanies the article.

● *Instructional Implications*

In the article, Guthrie lists instructional strategies known to increase reading engagement:

1. Identify a knowledge goal and announce it
2. Provide a brief real-world experience related to the goal
3. Make trade books and other resources available
4. Give students some choice about the subtopics and texts for learning
5. Teach cognitive strategies that empower students to succeed in reading these texts
6. Assure social collaboration for learning
7. Align evaluation of student work with the instructional context (for example, grade students for progress toward the knowledge goal)

By applying these strategies, teachers can integrate literacy support throughout a unit of content-focused teaching.

Guthrie describes the role of the teacher as more of a strategic planner and facilitator than director of learning. In this model, teachers deliberately apply strategies relating to the literacy demands of the content-area learning, appropriately select materials, use rubrics and other evaluation strategies to provide formative as well as summative feedback, and purposefully group students to enhance learning. These strategies allow teachers to create classroom-based experiences that are responsive, interactive, and connected to real life, thereby inviting and supporting students to more actively direct their own progress as learners.

✦ *Curricular/Program Implications*

Elements of choice — such as allowing students to choose their own subtopics and providing multiple resources — obviate the monolithic approach dictated by whole-group, textbook-driven instruction. With more types of resources available, the curriculum must provide more strategies to access information using them. For instance, productively using the Internet for research requires that students understand citations, hypertext, and search strategies. To use journal articles or narrative fiction for a specific project, students need instruction on how to analyze those text structures and how to compare and contrast implicit and explicit arguments. In addition, the use of evaluation tools requires time to reflect, critique, and practice with those tools.

▲ *Structural/Systemic Implications*

Literacy strategies have a powerful synergistic effect if students experience them as a regular part of their educational experience across the content areas. To do so, classroom environments must support effective management of collaborative learning. Additionally, more in-depth exploration of literacy strategies for content-area learning requires larger blocks of time. Administrators must consider how to schedule larger blocks of time, provide access to the library and technology resources, and ensure that teachers experience ongoing professional development.

■ *Professional Development Implications*

Helping teachers choose the best research-based strategies requires ongoing professional development, as most teachers are not familiar with all of the instructional strategies on Guthrie's list. Study groups, action research teams, co-teaching with a reading specialist, and a series of workshops with follow up are effective methods to help teachers implement these practices on a regular basis.

◇ *Assessment Implications*

Presumably, as Guthrie's research indicates, if students are more engaged as readers they will learn more, become better readers, and participate more fully in school because they see themselves as successful learners. Therefore, assessment should reflect these primary outcomes.

Additional Notes

This online article is the fifth in a series drawn from the *Handbook of Reading Research: Volume III* (Kamil, Mosenthal, Pearson, and Barr, 2000).

Krogness, M.M. (1995). *Just Teach Me, Mrs. K.: Talking, Reading, and Writing With Resistant Adolescent Learners.* Portsmouth, NH: Heinemann.

Overview of Contents

In a combination of memoir and instructional handbook, Krogness looks back on a year spent with "resistant adolescent learners" in a suburban Cleveland junior high school. Krogness begins with an overview of her own background and a description of the school. Shaker Heights Middle School is a traditional, departmentalized, and tracked school for seventh and eighth graders. Krogness works with the lowest level of language learners in an experimental, double-block, English/reading class period. The student population is primarily black, poor, and academically deficient.

Many of the students have experienced little in school that affirms or supports them. Krogness emphasizes the importance of talk in the language arts classroom, whether it is talking about personal experiences, improvisational theater, poetry reading, or the reading aloud of both literature and student writing. She validates her students' nonstandard, spoken English, while helping them see the differences between it and standard 'school' English. Students keep journals in which they record ideas, draft and redraft original writing, and respond to literature. Krogness mixes these strategies with great patience and humor, building a rapport with her students that few have ever experienced before with a teacher. She also involves numerous outside experts in these innovative classes, such as an art therapist and professional actors. Other school staff, including the school librarian and student teacher, collaborate with her in delivering a unified and contemporary English language arts curriculum.

Most of the book focuses on instructional strategies in language learning and descriptions of the students' progress. After several chapters on various instructional strategies, the author discusses the challenges of assessing student learning within the context of traditional grading policies at Shaker Heights Middle School. The final chapters are essentially case studies of students mentioned in previous chapters. Krogness maintains optimism for some of her students' eventual success, but the confining environment of true poverty (not just economic, but emotional and intellectual poverty as well) impedes their progress. This does not bode well as these students leave Krogness's class for a more traditional high school structure. Nevertheless, the young people come alive in these pages, and a reader can only hope that some will find another teacher-mentor like Mary Mercer Krogness to support them in high school.

● *Instructional Implications*

Krogness describes the strategies she uses to engage her students in learning spoken and written language. Talk is a central feature and spiral notebook journals are ubiquitous, as students respond in writing and discussions among themselves and with their teacher. Krogness exposes her students to a wide range of literature, including classic fairy tales, contemporary young adult novels, contemporary and classic poetry, and drama. She usually begins reading this literature aloud, so that students do not have to struggle with decoding words and can begin to appreciate the connections to their own lives. In addition to discussing and writing their responses, students eventually write original work paralleling what they have read, especially poetry and drama. Theater exercises address both improvisational theater and formal acting of classic works such as Julius Caesar. Although Krogness emphasizes how she guides the process, she also encourages active student collaboration to create a meaningful learning experience.

Typically, the author gives the reader more than just a recipe for implementing particular instructional strategies. She describes her own problems and those of her students as she struggles against their apathy and occasional outright hostility. The underlying philosophy of supporting students to make progress sometimes leads to frustration, but nonetheless she perseveres and finds a measure of success for some students.

✦ *Curricular/Program Implications*

Krogness takes liberty in deciding what materials meet her goals. She purposefully selects materials and texts that engage her students. If many teachers were implementing this type of program, the schools would need to provide a wide variety of books and materials with which to work.

▲ *Structural/Systemic Implications*

The double-block class period is a boon to Krogness's program. With the longer 90-minute period, she is able to conduct multiple activities relating to literature, drama, and poetry. Krogness is highly critical of the traditional, tracked classes that dominate Shaker Heights Middle School and of her colleagues who rely on content-dominated, traditional pedagogy. The majority of her students have long and debilitating histories of school failure. Although it is not clear whether she completely accepts her students' beliefs about other teachers' racism, she does not reject that explanation either. Rather, she works with her students to understand racism through

reading works by African American authors, most notably Virginia Hamilton. Krogness is disturbed by messages from the school system that result in students having serious, negative self-concepts of themselves as struggling or failing learners.

Krogness is also critical of a middle school structure that segregates students into tracks that are both economically and racially defined. She sees little that connects her students' school experiences to their lives outside school or to their dreams and hopes. While very positive about the support she receives from several colleagues, she feels that most teachers have stereotypical expectations of these students that in turn feed the students' pernicious decline. She suggests that school structures link with the community and teachers become advocates for students, since education is, for many, the only way out of a spiral of failure.

■ *Professional Development Implications*

Several professional development opportunities informed and enhanced the development of this language arts program. Krogness describes theater and writing workshops at length as well as some of her professional readings. She is a lifelong learner who takes her professional development seriously.

Reading this book and reflecting on Krogness's travails can form an interesting basis for a facilitated discussion among a group of teachers. Teachers can reflect on how Krogness' work challenges the common view of low-achieving early adolescents. This book offers many interesting ideas about transforming the language arts classroom into a community of language learners.

◆ *Assessment Implications*

Krogness struggles with assessment using the traditional, letter-grade structure at Shaker Heights Middle School. Eventually, she collaborates with her students to develop evaluative criteria that appropriately reflect progress and effort. Students' "writing archives" are used to measure progress based on indicators such as involvement in revisions. Krogness values the authenticity of students' writing and their voices as writers. She argues that exposure to literature and continuous writing will result in improvement in standard English usages such as spelling and mechanics. Many of her students have been inundated with worksheets on conventions to the point where they are reluctant, at best, to express themselves in written form. The numerous examples (many are reproduced as figures in the students' handwriting) powerfully illustrate the difficulties that these students experienced. Nonetheless, Krogness does manage to negotiate her school system's need for grades and her students' need for "official success" expressed by grades. Her classroom is awash in good assessment practices, including her detailed comments on students' work and the students' assessment of their own and peers' work. This informal formative assessment is one of the key attributes of her program.

Additional Notes

Because the case study examples, while well-written, are so numerous and lengthy, one approach to this book is to read and discuss one chapter at a time, preferably with a discussion partner.

McCombs, B.L. & Barton, M.L. (1998). Motivating Secondary School Students to Read Their Textbooks. *NASSP Bulletin* 82 (600) 24-33.

Overview of Contents

In this article, McCombs and Barton assert that in order to motivate students to read a textbook, the school must put into practice the current research on student motivation and cultivate the conditions that best promote reading and learning. The authors support the standards movement but state that describing outcomes is not enough: "Motivating and achieving challenging standards are possible only when there is a corresponding focus on the learner and his or her needs." They argue that it is necessary to create a learning environment where students feel a sense of belonging, competence, respect, and trust. Supporting student learning in this way fosters motivation to learn and promotes a personal responsibility for learning. After an overview of statistics on teenagers, the article moves into a review of research and makes suggestions for implementation.

● *Instructional Implications*

Instruction that fosters a learner-centered environment allows for the following:

- the formation of meaningful adult and peer relationships
- dialogue, collaboration, and the expression of personal and collective views
- acknowledgment and respect for unique abilities and talents

Applying these learner-centered principles to literacy means that teachers use readers' prior knowledge, experience, and perceptions as they assist students to make meaning from text. This can take place through a variety of pre-reading activities such as KWL (know/want to know learning strategy), DRTA (directed reading-thinking activity), or the PreP (pre-reading plan). Each of these strategies requires that students answer two focus questions: (1) What do I already know about this topic? and (2) What new information do I need to learn about this topic?

In addition, instruction should stimulate curiosity, creativity, and make use of higher-order thinking skills. Two methods highlighted in this article are problematic situations and writing-to-learn. In problematic situations, interest is generated through students wrestling with a similar hypothetical conflict to that of the people discussed in the text. Writing-to-learn asks students to reflect on and explore content-area concepts from their reading in order to extend what they have learned.

✦ *Curricular/Program Implications*

To foster a learner-centered environment, the program must allow for

- connections to life issues and personal interests,
- challenge and talent development,
- cooperative teaming when appropriate.

This can take many forms in the curriculum.

When selecting texts, teachers should consider the text's organization, coherence, and developmental appropriateness. Well-written, visually appealing texts that provide in-depth

information inspire students to read. Allowing students to choose what they read motivates them to learn, while helping them to become self-directed and self-regulatory learners in the long run. Some research indicates that only in a context that provides choice can motivation and self-regulation occur. Self-regulation is essential to effective reading comprehension and heightened awareness of the metacognitive behaviors employed in reading.

▲ *Structural/Systemic Implications*

Creating a learning environment is the collective work of a whole school. Teachers and administrators should work together to construct a climate, instruction, curriculum, and assessment that promote student motivation. Structures should forge new ways of working together and allow for open dialogue.

One way to create this climate is by organizing the school day to allow for meaningful relationships to form among students, teachers, administrators, and peers. Another option is offering a mentor relationship with a significant adult who helps connect students with families and other support systems. Providing a structure within the school to make the mentor relationship a consistent part of every student's experience makes mentoring more effective.

According to the research in this article, the school- and classroom-level practices that best support high levels of learning and motivation provide the following:

- opportunities for active learning that address continuous academic and social growth
- individualized performance expectations, support, and structures appropriate to a student's needs and maturity
- varied learning environment and reward systems that foster respect, trust, caring, and cohesiveness between students and school staff
- opportunities for student voice and input, including classroom and school rules cooperatively determined by faculty and students
- flexible curriculum and co-curricular activities that help students connect school learning with life goals and purpose

Systemically, these recommendations can take the form of implementing personalized learning plans, restructuring student government or other vehicles for student voice, and creating classrooms where students have a voice that has a genuine impact on curriculum and instruction.

■ *Professional Development Implications*

This article argues for going beyond content, standards, and curriculum (technical domain) and management structures, decision-making strategies, and policies (organizational domain), in order to focus on beliefs, assumptions, and interpersonal relationships (personal domain). Therefore, the key to implementing any of the ideas in this article is changing the thinking about students, classrooms, school practices and policies, staff roles, and the learning process. Although change starts with underlying personal beliefs, this new way of thinking about students and motivation should be reflected in the "technical" and "organizational" domains of schools.

Therefore, professional development must foster ongoing dialogue about these issues. Additionally, professional development should develop teachers' knowledge of the literacy

strategies and offer support as they integrate the strategies into content-area learning. Otherwise, no real impact on student experiences in schools will be realized.

◇ *Assessment Implications*

Assessment that supports a learner-centered environment should allow for

- evaluation of and accountability for personal growth and progress,
- affirmation of and respect for unique skills and talents,
- reflection on the learning process,
- planning of next actions.

Although the article does not explore this topic further, practices such as student portfolios, personal learning plans, performance-based assessment, and student choice of how to demonstrate learning are a few ways to implement these learner-centered principles.

Moore, D.W., Alvermann, D.E., & Hinchman, K.A. (2000). *Struggling Adolescent Readers: A Collection of Teaching Strategies.* Newark, DE: International Reading Association.

Overview of Contents

Authors Moore, Alvermann, and Hinchman investigate the effect of a student's personal background on building literacy skills. This book addresses the challenges of enhancing the literacy skills of students with reading disabilities, those whose second language is English, those with varying ethnic and cultural backgrounds, and those who have been previously limited in academic success. The authors emphasize that teachers must be aware of students' individual background and needs, especially as teachers vary texts to create connected, meaningful experiences with language. The focus on cultural background, along with strategies and examples, is a strength of this book. The authors strike a good balance between drawing similarities common to struggling readers and acknowledging the differences among students. The book offers a number of specific teaching strategies that manage to retain the focus on the individuality of learners.

The authors encourage building literacy skills across the curriculum and present specific examples from the social studies classroom. Because the authors see literacy as being developed in all classes and both in and out of school, the book reflects an integrated approach to building literacy skills. Topics include: literature-based, cognitive strategy instruction; embedded questioning to jump-start metacognition; and teaching decoding to older students.

Examples in the book are drawn from middle school classrooms and students. However, much of what is said about literacy is directly applicable to high school students and classrooms. The book closes with a review of high school reading programs.

● *Instructional Implications*

The level of personalization required to effectively build literacy skills is the most significant implication for instruction. The only way to meet students' needs is to know them. This necessitates that teachers think of students as individuals, relate to them as such, and create structures whereby teachers can know students and students can better know themselves. This book describes classrooms where all people, including the teacher, view themselves and others as developing readers. Creating an environment of support and growth eliminates the tendency of students to hide in fear of their weaknesses being discovered by the teacher and peers. The difficulty of building literacy is openly discussed among students and between teachers and students. The focus of literacy skills shifts from performance to growth. Teachers are transformed from judges to experts and become resources for students who are working on their literacy skills.

✦ *Curricular/Program Implications*

The curriculum is reformulated to meet individual student needs through appropriately selected strategies and high-interest texts. Furthermore, the success of this manner of individualization makes clear the ineffectiveness of using only all-class texts, even within a school that has attempted to create homogenous groups of learners.

In addition, this book makes a convincing appeal for teaching decoding to older students. Although decoding is not seen as a cure-all, it is advocated along with the acknowledgment of the difficulty of reading and of learning to read. Part of the process involves parental support, particularly with students of limited English proficiency (LEP) and students from different cultural backgrounds.

▲ *Structural/Systemic Implications*

Creating classrooms where teachers know students well enough to personalize their education naturally raises the questions of class size and student-to-teacher ratio. Although these questions do need attention, teacher contact is not the only method advocated in this book as a means to build student literacy.

Professionals or experts in the area of literacy development can assist teachers to integrate personalization into the curriculum. Teachers need to know more about the processes of reading and of learning to read in order to help their students. Working with a colleague during this training can provide valuable support. Structurally, teachers need a time and a place for such thoughtful collaboration.

The authors describe six, helpful guidelines for implementing peer and cross-age tutoring to help personalize student learning. These are based on one of the central beliefs of collaborative learning: that students learn most efficiently from one another.

In a section on students who demonstrate competent reading comprehension, the authors highlight recreational or voluntary reading. The idea is that students build literacy skills, confidence, and pleasure through practice during a voluntary reading program or recreational reading time (e.g., sustained silent reading). Some schools have adopted the practice of quiet reading time during

the school day, while others have encouraged reading outside of school through different methods.

An important systemic implication is developing a way of communicating, keeping record, and revisiting students' progress within a course, grade level, and school. One suggested method is a literacy portfolio that contains goals, student self-assessment, teacher feedback, and student work as evidence. Building effective, meaningful portfolios is an undertaking that requires vision, good communication, and effective methods of achieving student investment. If done improperly, literacy portfolios can add to the burden that struggling students already feel when confronting literacy tasks as well as to their sense of failure from conceiving of themselves as struggling readers and writers.

■ *Professional Development Implications*

Students build literacy in all subjects, both inside and outside of school. Becoming literate is a lifelong process, not one mastered in lower grades. Attention to literacy should not be limited to the language arts or English teachers. School staff, teachers, and students should view literacy as a life skill that is necessarily cross-disciplinary. The assumption that literacy skills are stable across genres is false. For example, a student who frequently reads novels with ease may not have the same skill or confidence in reading a scientific journal, poem, or graph. Professional development should facilitate conversations to assist teachers in understanding how to address such literacy issues in content-area classrooms.

◆ *Assessment Implications*

The belief that literacy achievement is a lifelong process of continued growth has implications for assessment. Opening up the dialogue on literacy naturally begins with the question, What is literacy? Some consider it comprehension, personal connection, or application. The answer lies in a deep understanding of literacy that extends beyond students having an accurate recollection of the sequence of events in a novel. Deeply exploring literacy enriches students' experience of language and communication. Ultimately, a more complex understanding of literacy is reflected in the nature of assessments with which students are challenged.

Discussions reflecting the students' continued struggle and success with literacy skills enters assessment practices, perhaps in the form of student and teacher conferences on portfolios. If teachers encourage students to remove the masks behind which they hide and attempt to fool the teacher, then teachers and students can enter into an honest dialogue about the struggle with literacy. Student voice, self-assessment, and student growth from the true starting place need to be valued in the most summative form of communication about student progress and standing that exists: grades.

Schunk D.H. & Zimmerman, B.J. (1997). Developing Self-Efficacious Readers and Writers: The Role of Social and Self-Regulatory Processes. In J.T. Guthrie & A. Wigfield (Eds.), *Reading for Engagement: Motivating Readers Through Integrated Instruction* (pp. 34-50). Newark, DE: International Reading Association.

Overview of Contents

Schunk and Zimmerman focus this chapter on the role of self-efficacy in literacy. They discuss how observing social models, participating in goal setting, and engaging in self-evaluation can influence motivation, orthographic learning, and self-efficacy. Self-efficacy reflects the beliefs that a person has about his or her capabilities to learn or perform at designated levels. Research has shown that a student's self-efficacy predicts his or her motivation for learning and use of self-regulatory processes. Self-regulation is based on goals that establish the standards by which a person measures his or her progress. A person's progress towards established goals provides a feedback loop that supports self-efficacy and provides motivation for continued learning. By understanding and harnessing this feedback loop, educators can motivate students toward further learning.

This chapter is grounded in social cognitive theory. Bandura (1986), a leading social cognition theorist, believes that human behavior depends on reciprocal interactions among thoughts, beliefs, behaviors, and environmental factors. For example, a student has a belief about his ability to understand new scientific concepts in an assigned reading. As the student reads, he forms ideas about the reading experience and determines whether he is meeting the established reading goal. This in turn affects the student's motivation level. A student may think, "I am really getting it. I am meeting my goal, and I am motivated to keep going on to more difficult words. I am capable of learning these words." Or, conversely, "I am struggling more than I thought I would. This article is too difficult for me. I wish I could stop." The interaction between experience and beliefs about capability can influence progress. If a student experiences a sense of struggle, it can lead to work avoidance and acting out. They may say, "This article is stupid. Why are we reading it?" or may demonstrate other disruptive behavior. This chapter explores the implications of this dynamic specifically within the context of reading and using language, although the theory has implications for all learning.

● *Instructional Implications*

After gaining an understanding of this theory, teachers can focus on three areas to incorporate into their teaching practice. These include: (1) more conscious modeling of desired skills and behaviors for students, (2) explicitly teaching effective learning strategies, and (3) involving students in goal setting and evaluation.

It is a challenge to effectively integrate goal setting and self-evaluation into a meaningful classroom experience. Many of the techniques for goal setting and shared evaluation between students and teachers sound easy enough, but authentic communication in these areas of learning breaks through the paradigm of "teacher as authority, student as passive participant." This new model sees teacher and student as allies interacting with the text as opposed to the former model of teacher and text against the student.

For this shift to take place, students must feel that teachers truly care about their thoughts and feelings about learning. Once an authentic dialogue is opened between teachers and students, the strategies of goal setting and self-evaluation can have great impact on student achievement. However, if students sense that the dialogue about learning is mere lip service, the negative ramifications on student achievement may be worse than not inviting student input in the first place.

✦ *Curricular/Program Implications*

Goal setting and self-evaluation inevitably consume additional class time. However, these practices do not need to take center stage and, in fact, are more effective when viewed as a means to learning rather than as an end in themselves.

▲ *Structural/Systemic Implications*

The involvement of the student in evaluating and setting goals creates a significant shift in structure. In many schools, teachers are the only ones involved in evaluating student progress and establishing new goals based on progress. Instead, this model advocates a joint process whereby teachers and students share the role in shaping student learning.

Implementation of this model is highly personalized. It asks teachers and students to establish appropriate, manageable goals whose mastery will build efficacy. There is no way to do this effectively in practice without dealing with students as individuals. Therefore, this model also necessitates smaller class size. As a result, it may be extremely difficult to implement given typical teacher-student ratios in most high school settings.

Creating a method by which progress can be communicated year-to-year is an element for school administrators to consider. One option is the use of portfolios, which can capture student goals, progress, achievement, and self-efficacy.

■ *Professional Development Implications*

Professional development should help teachers become an expert on the process of learning as well as their subject area. Through a better understanding the learning process, of which self-efficacy is an element, teachers can meet student needs and support them toward greater success.

Discussion about the relationship between self-efficacy and motivation for continued learning can help teachers see the value of modeling, goal setting, and student self-evaluation. If the reasoning is not fleshed out, teachers are left without a meaningful understanding of the theory in which the strategy is grounded. Without an understanding of the impact of modeling, goal setting, or self-evaluation, teachers may view these as superfluous or "touchy-feely." These activities may then be cut when time is short, resulting in essential practices not being integrated lesson-to-lesson, unit-to-unit, or year-to-year.

In addition to having a theoretical understanding of the technique's importance, teachers need support to successfully implement the technique. Just as students set goals, evaluate progress based on experience, make judgments about their capability to learn, and set new goals, so do

teachers. Without proper modeling of the technique or appropriate, achievable, self-generated goals for implementing the model, teachers may not be motivated to continue implementing the technique.

This model of self-efficacy, as applied to learning to teach, better connects with the basis for action research, which at its heart sees teachers as learners. When teachers select an area of practice that they want to improve, they establish their own goals and methods to achieve them. They continuously evaluate their progress and build motivation to improve their teaching, thus reinforcing beliefs about themselves as capable teachers.

For a teacher who is unfamiliar with or who has previously been unsuccessful at goal setting and using self-evaluation with students, professional development is essential. This teacher needs modeling, appropriate goal setting, and self-evaluation in reference to the goals. Observing a teacher who effectively implements goal setting or student self-evaluation (whether through conferences, written student-teacher dialogues, or another method) can illustrate what this practice looks like in action. Setting an achievable goal, such as implementing the practice and looking for a particular mark of success (e.g., observing increased learner motivation or being more aware of individual student progress), followed by establishing new goals, is a powerful professional development approach.

◆ *Assessment Implications*

One component of this model is student self-assessment. In order for students to take this process seriously, they need to feel that their efforts have an impact. Student voice must be reflected explicitly as part of the grade for a project (and therefore a course). Otherwise, only the most motivated students, aware of the positive effect of self-assessment on their learning, will use it. Imagine a classroom where students are asked to evaluate their performance or progress and yet the teacher never looks at these writings. Or consider a classroom where students have the feeling that teachers are talking at them instead of dialoguing with them about their learning. Just as there is the potential for great positive impact on learning to come out of these practices, negative learning impact can result from poorly valued student voice. In addition, some goals are hard for students to assess accurately without feedback from a teacher or peer. An example is the goal of "comprehending text better." This is a case in which students and teachers must work together to assess progress and, based on progress, establish new goals.

The discussion on setting goals has impact on assessment. In order to set appropriate goals, students need to be honest about their skill level and starting point. However, if students sense that they will be negatively judged, they may see it as in their best interest to cover up their shortcomings. Because proper evaluation consists of measuring progress from starting point to end point, the educational environment should encourage students to be honest about their learning process.

Wilhelm, J.F. (1995). *"You Gotta BE the Book": Teaching Engaged and Reflective Reading With Adolescents.* New York: Teachers College Press.

Overview of Contents

Wilhelm's book is the product of a collaboration between this former middle and high school teacher and his students as they explored the experience of reading together. Theoretical ideas and shared teaching practices emerged from this reading research project. This is essential to note, as this level of collaboration is a key element of Wilhelm's student-centered approach.

Wilhelm believes that teaching reading is about motivating students to deeply engage with the text. In order to develop readers, "We must encourage and foster the creative attitudes and activities of engaged readers." This involves not only teaching a set of skills, strategies, or texts, but also actively supporting how readers build meaning. The classroom turns into a place where students: (1) produce and share meanings, (2) become aware of the strategies that they and other students use in the process of reading, and (3) share ways of reading and experiencing a text. When students are not engaging with the text, a teacher should work with them directly on what would help them to engage more deeply. Two primary ways to support students in their reading process are drama and the visual arts, both of which help students more fully experience what they read.

This book focuses on using performance and visual art as metacognitive tools that enable readers to become intimately involved with text and the process of reading. The author speaks of students as individuals and uses many classroom and student examples to illustrate points. He skillfully and uniquely draws upon students' experiences to craft a theory of teaching literature. The result is a responsive, collaborative learning environment where previously disengaged learners embrace reading and writing as doors to learning and expression.

● *Instructional Implications*

Central to Wilhelm's theory is the reader-centered classroom. Teachers will miss the mark if they only employ the specific instructional strategies of this book without equally embracing the premise that students are valuable experts on their own learning.

Throughout the book, Wilhelm shares his exploration of the following questions:

1. What can be done in the classroom to develop reluctant readers and extend the abilities of all readers?
2. What do "mature" readers do to engage in "rich and powerful" readings?
3. How can less engaged readers be encouraged to do these things, and with what effects?
4. How can students be helped to experience literature and to tell the story of their reading, discovering for themselves the power and variety of the literacy experience?

By answering these questions, Wilhelm observed 10 dimensions of reader response. They are categorized as follows:

- Evocative Dimensions, entering the story world, showing interest in the story, relating to characters, seeing the story world
- Connective Dimensions, elaborating on the story world, connecting literature to life
- Reflective Dimensions, considering significance, recognizing literary conventions, recognizing reading as a transaction, and evaluating the author and the self as reader

In Evocative Dimensions, readers are operating out of a willingness to read and an interest or excitement in reading. They begin to think about what the reading may be like, which is informed by previous reading and their life experiences. Connective Dimensions are transitional in that readers are moving from experiencing a story world to stepping back and connecting what they read to other texts and life experiences. When readers reflect on reading experiences, they demonstrate Reflective Dimensions.

Out of this understanding of the ways in which readers respond to text, Wilhelm then illustrates how drama and visual arts can be part of the process of engaging readers in these different dimensions. Drama puts the reader inside the world of the story. Thus readers experience text differently — from the inside rather than from the point of view of an outside spectator. From this insider's perspective, readers access the text because they have become a part of it. To this end, Wilhelm summarizes nine types of dramatic activities that engage readers.

The second vehicle for accessing the story world is the visual arts. He explores how symbolic story representations, visual protocols, reading illustrated books, illustrating books, picture mapping, and collages can help students become part of what they are reading — to see it from the inside out. This approach makes readers active participants, while tapping into several of the multiple intelligences.

✦ *Curricular/Program Implications*

The type of classroom advocated is one of responsiveness and creativity. This does not mean teaching without a plan, but rather creating a teaching and learning environment that adapts to the needs and experiences of students. This approach to teaching literature has implications for what texts are included in the curriculum. Wilhelm dedicates a section of his book to this topic. He asserts that the concept of literature includes various types of texts: young adult novels, picture books, comic books, illustrated books, organic nonfiction pieces, and student writing. This broader definition of literature invites more students to become readers, composers of literary response, and people who talk about their literary experiences. Wilhelm believes that this "transactional view of literature makes the case that any intense and personally fulfilling experience with text is an aesthetic literacy experience." For those concerned about the loss of teaching classic, canonized texts to students, it is worth pondering the question, "What is our purpose as teachers, to teach texts or to develop readers who can and will want to engage with and know texts in a personally powerful way throughout their lives?" Readers who develop an appreciation of language and confidence in their ability to access texts can eventually read canonized texts and appreciate them.

▲ *Structural/Systemic Implications*

One hallmark of this approach is the belief that students are experts on their own learning and can be tapped as knowledgeable resources within the classroom. This shift in perspective on what students can contribute to the classroom and to the curriculum-designing process may challenge many teachers. For some teachers, it may take time and practice before they feel comfortable.

■ *Professional Development Implications*

Many teachers who currently operate within a teacher-centered model need support in making the transition to a student-centered classroom. Wilhelm, who initially ran a teacher-centered classroom, can relate to the uncomfortable feeling of leaving the security of an anthologized course with organized lessons and activities to creating a course whose wellspring is the needs and experiences of the students. For Wilhelm, this shift involved a reconceptualization of the reading process.

A motivated, reflective teacher, Wilhelm recognized the limitations and failures of his previous model of working with students. His desire to better meet student needs overrode his desire for comfortable security with familiar ways of teaching. Teachers who are strongly committed to creating the best experience for their students continually reflect on their teaching and adapt in order to be more successful. Harnessing this desire for improvement is key to making any substantial change in teaching practice.

One method of encouraging this attitude is embracing the model that teachers are learners in the craft of teaching. In this model, teachers experiment with new approaches and observe their classrooms not only for student achievement, but also for whether their methods are effectively helping students to learn. One method that uses this model of teacher as learner is action research. Similarly, Wilhelm approached his classroom as a laboratory to learn about reading. By taking on this reflective researcher role, Wilhelm could ask the questions necessary to developing a better understanding of reading and take the chances to create a teaching practice that best met the literacy needs of his students.

◆ *Assessment Implications*

Drama and visual arts can be cognitive and metacognitive tools that help students both access texts and express understanding of texts. A teacher can therefore use drama or art to assess student understanding. In one of the drama activities described, students assume a character's identity from their reading and are challenged to play the character convincingly as they answer questions in front of a panel of judges. In this game, it is essential that all involved have intimate knowledge of the character's history, personality, psychology, and so forth. With the aid of rubrics, teachers assess the students' understanding of the character. Similar examples can be found throughout the book. This approach leads to greater creativity in teaching and in designing a variety of assessment practices.

Overview of Key Component B:

Implement Research-Based Literacy Strategies for Teaching and Learning

Making Literacy Part of Every Student's Middle and High School Educational Experience

Two kinds of literacy strategies effectively support adolescent literacy development: generic literacy support strategies and discipline-based strategies. The first type, which is the focus of this section, consists of those research-based strategies that support literacy development across the content areas. These are generic strategies that the research has proven effective (for example, strategies related to reading, writing, assessment, collaborative learning, and the development of cognitive and metacognitive skills). The second type, which depends upon the teachers' recognition of the literacy demands inherent in their disciplines (for example, vocabulary and concept development, text structures, and discourses) and through which understanding of a specific content area is enhanced, is the focus of the next section.

During the 1980s and early 1990s, researchers posed two central questions. Can literacy skills be taught? And, if so, does direct instruction of literacy strategies correlate with greater student achievement? Many teachers and administrators, hesitant to make the significant changes necessary for literacy support, have wanted these questions definitively answered before dramatically shifting classroom and school practices. They have wanted reassurance that if they faithfully implemented these practices, they would see results. With so many strategies to choose from, they have needed guidance on how to select what would work best in their context. Frustrated with what has appeared to be contradictory evidence and claims by different companies and consultants regarding the best strategies, many secondary school educators have either selected strategies arbitrarily, or worse, not provided deliberate literacy support in their content-focused classes at all.

Contrary to common beliefs, the research base in this area is solid and has proven consistent for more than a decade. We know a lot about how to teach reading to struggling adolescent readers. We know a variety of strategies that encourage successful literacy development. A substantial body of research points to promising reading comprehension strategies for adolescent learners. Differences do exist between better and poorer readers in metacognitive skills — methods for learning, studying, or solving problems, and awareness of one's own thinking processes (Duke & Pearson, in press; Pearson, Roehler, Dole, & Duffy, 1992). Nevertheless, researchers are in resounding agreement that poorer readers can be taught the strategies that better readers use (Alvermann & Moore, 1991; Weinstein & Mayer, 1986). Researchers also concur about the necessary conditions for implementation: to make effective use of these cognitive and metacognitive strategies, students must learn the literacy strategies, be given time to practice and apply them to a variety of contexts, and use them to learn across the content areas.

Based on the research, the following combination of literacy best practices result in enhanced literacy for diverse learners. The practices relate to the following:

1. Teacher strategies
2. A focus on reading and writing
3. The importance of speaking and listening
4. An emphasis on thinking
5. The establishment of student-centered classrooms

Researchers have examined the results from the use of these practices throughout the content areas and in required, year-long literacy courses for all students (Schoenbach, R., Greenleaf, C.,

Cziko, C., & Hurwitz, L., 1999). Mining this research yields a clear picture of the types of teaching and learning practices that scaffold literacy development and enhance content-area learning. The key is to have all of the identified best practices occurring regularly as part of every student's middle and high school program.

Best Practices Related to Teacher Strategies

The research supports literacy skills and strategies that are taught and used in context rather than in isolation — a direct contradiction to the skill and drill worksheets often advocated for remediation (Langer, 2001; Schoenbach, et al., 1999). The research does not show strong results for students who learn skills in isolation and then are expected to apply or transfer those skills appropriately at their own discretion. However, ample evidence proves that a number of particular literacy strategies, when explicitly taught, modeled, and practiced, enhance the ability of secondary school students to use reading and writing skills to learn across the content areas (Alvermann & Moore, 1991; Rosenshine & Meister, 1994; Rosenshine, B., Meister, C., & Chapman, S., 1996; Rosenshine, 1997; Schoenbach, et al., 1999). The research is particularly emphatic that reading comprehension can be greatly improved through regular use of certain strategies before, during, and after reading. Successful strategies include the use of: anticipation guides, KWL, reciprocal teaching, graphic organizers, question generating, directed reading-thinking activity (DRTA), think alouds, sensory imagery, drama, art, and structured note taking (Billmeyer & Barton, 1998; Christen & Murphy, 1991; Buehl, 2001; http://www.indiana.edu/~eric_rec/ieo/bibs/rdcompsc.html).

Reading and writing are complex combinations of skills that vary by context. Reading a scientific journal does not require the same set of skills as reading a historical novel. Writing geometric proofs, lab reports, short stories, poems, and persuasive letters requires overlapping but not identical sets of skills (Grossman & Sodolsky, 1995). Moreover, people who are proficient in some aspects of reading and writing are novices at others. Modeling and using a literacy apprenticeship framework are effective ways to make reading and writing visible and, therefore, to support the development of more sophisticated reading and writing skills (Schoenbach, et al., 1999).

Effective literacy support also occurs when teachers modulate their instruction based on the information gleaned from a variety of literacy assessment strategies (Langer, 1999a). When teachers use multiple literacy assessment strategies, they learn important information for matching instruction to student needs (Peterson, et al., 2000). Assessment strategies include: writing and presentation rubrics; self-assessment inventories; cloze passages; individualized reading inventories (IRI); teacher-created assignments; and, where appropriate or mandated, standardized or standards-based tests. Use of these strategies helps students understand their literacy strengths and areas of challenge, thereby empowering students to take better charge of their learning.

Best Practices Related to Reading and Writing

The research supports the common-sense notion that time spent reading and writing will improve those skills (Davidson & Koppenhaver, 1993). Examples of strategies that simultaneously increase content understanding and improve reading and writing skills are: paired reading; quick writes; peer conferencing; creation of Reader's Theatre scripts; use of Jigsaw groups to discuss different

short readings on the same topic; rereading assignments for a different purpose; rewriting text from other points of view; and connecting text with other media using a critical literacy perspective. Sustained silent reading (SSR), when effectively implemented, also has been linked to building a positive literacy culture, by supporting reading practice, addressing the needs and interests of a variety of learners, and improving reading skills (http://www.indiana.edu/~eric_rec/ieo/bibs/ssr-sec.html; Flaspeter, 1995).

Research also supports the use of the writing process as an integral part of content-area literacy development. Effective writing instruction gives students frequent opportunities to write, accompanied with feedback, expectations to revise, and opportunities to edit. This approach improves written communication skills, thinking skills, and memory (Alvermann & Phelps, 1998; Cotton, 1988; Langer, 1999a; Schoenbach, et al., 1999).

Best Practices Related to Speaking and Listening

Purposeful integration of speaking and listening into the content-area classroom improves reading comprehension and writing skills (Wilkinson & Silliman, 2000). Allowing for regular exchanges and use of spoken language supports the development and expansion of ideas. Frequent opportunities to collaboratively brainstorm, organize, write, read, share, revise, and present work can build multiple literacy skills. This results in richer individual work and the establishment of a learning community. Speaking and listening strategies can also reinforce the apprenticeship framework of literacy learning and assist with scaffolding, motivation, and making connections. Such collaborative learning is particularly important in supporting the literacy development of second language learners (Alvermann & Phelps, 1998; Collins, A., Brown, J., & Newman, S., 1989; Krogness, 1995; Langer, 1999a; Palinscar, 1986; Tharp, 1999).

Best Practices Related to an Emphasis on Thinking

The research strongly indicates positive correlations between adolescent literacy development and the deliberate and frequent use of cognitive and metacognitive strategies (Alvermann & Moore, 1991; Collins, 1994; Duke & Pearson, in press; Garner, 1992; Haller, E.P., Child, D.A., & Walberg, H.J., 1988; Langer, 1999a; Paris, S., Lipson, M., & Wixson, K., 1994; Rosenshine, 1997; Ruddell & Unrau, 1994; Schoenbach et al., 1999; Weinstein & Mayer, 1986). Combining cognitive and metacognitive strategies enhances content-area learning, thereby contributing to student success.

Cognitive strategies act as a catalyst for students using higher-order thinking skills. Cognitive strategy research on developing higher-order thinking skills repeatedly refers to the use of reading, writing, speaking, and listening both to learn and to demonstrate learning (Fitzgerald, 1995; Graves, 2000; Rosenshine & Meister, 1994).

Metacognitive strategies allow students to effectively monitor their own comprehension and skill in reading, writing, speaking, and listening. Although stronger and weaker readers use different metacognitive strategies, the research shows that weaker readers can learn the metacognitive strategies that stronger readers use (Alvermann & Moore, 1991; Weinstein & Mayer, 1986). These strategies help weaker readers improve reading comprehension and, therefore, content-area learning (Duke & Pearson, in press; Collins, et al., 2001; Graves & Graves, 1994; Palinscar & Brown, 1984, 1989).

Cognitive strategy instruction: Successful academic achievement and lifelong learning depend on a student's ability to effectively use language to analyze, synthesize, and evaluate. Meeting content-area standards requires students to

- make judgments based on the evidence in a text, Web page, TV show, advertisement, or film,
- create analogies,
- compare and contrast similar or dissimilar items, events, or points of view,
- use creativity to develop new representations or extensions of concepts,
- use critical thinking to analyze pros and cons,
- present arguments using language that communicates well-reasoned opinion.

These strategies must be taught, modeled, and practiced. Therefore, the infusion of literacy strategies into content-area instruction supports the development of the higher-order thinking skills necessary for in-depth understanding of content.

Metacognitive strategy instruction: Beyond learning and using cognitive strategies, students must become aware of themselves as learners. By monitoring one's own comprehension and skill in reading, writing, speaking, and listening, one becomes a self-regulated learner. Moreover, using a variety of goal-setting, problem-solving, and focusing strategies fosters academic success. Therefore, deliberately teaching metacognitive strategies related to each skill area benefits students, especially those who do not apply these strategies intuitively. Examples of metacognitive strategies include reciprocal teaching, two-column note taking, visualization, use of graphic organizers, and use of rubrics.

Best Practices Related to Creating a Student-Centered Classroom

The creation of a student-centered classroom is an important aspect of effective adolescent literacy development for diverse learners. In such classrooms, teachers expect all students to actively use speaking, listening, and thinking skills across contexts. Interactive discussions and experiential learning regularly occur. A student-centered classroom builds upon students' background, interests, and experience. Research has proven that this emphasis supports reading comprehension, student engagement and motivation, and the development of positive literacy identities. Again and again, the research refers to literacy being best supported by the role of the teacher as facilitator, not lecturer. This requires the effective structuring and coaching of collaborative learning experiences. Effective teachers deliberately use varied groupings to meet the needs of diverse learners relative to addressing specific curriculum goals (Alvermann & Phelps, 1998; Collins, 1996; Langer, 1999a; McCombs & Barton, 1998; Tharp, 1999; Tierney & Pearson, 1981, 1992).

Overview of Section

In this section, two kinds of resources are reviewed: research summaries and descriptions of research-based instructional strategies.

Research Summaries

Most of the resources reviewed in this section include: research summaries that encapsulate what we know about teaching adolescents to read, research studies that support specific strategies such as reciprocal teaching and question generating, and a review of what the research says about the teaching of learning strategies. These resources capture what the research says in these areas over the past two decades. They are representative of the research studies and summaries listed in the bibliography and provide a sense of how researchers have approached the issues. By reading the reviews, secondary school educators can develop an understanding of salient issues and can familiarize themselves with the strong research base in this area.

Descriptions of Research-Based Instructional Strategies

Many recent publications describe effective research-based literacy strategies to use with adolescent learners. One of these, *Classroom Strategies for Interactive Learning*, is included in this section because it situates specific strategies within the related research. This resource illustrates how to integrate the strategies across the content areas. Several other related resources are reviewed elsewhere in this book (see below) and listed in the bibliography. In addition, the Internet has become an invaluable source for finding descriptions of literacy strategies and classroom examples. Many excellent links can be found in the Adolescent Literacy in the Content Areas Spotlight on The Knowledge Loom Web site (www.knowledgeloom.org).

Note: Related resources, reviewed in other sections, are listed below. (See the Table of Contents to find the full review.)

- *Beating the Odds: Teaching Middle and High School Students to Read and Write Well*
- *Building Reading Proficiency at the Secondary Level*
- *Content Reading and Literacy: Succeeding in Today's Diverse Classrooms*

Alvermann, D.E. & Moore, D. (1991). Secondary School Reading. In R. Barr, M.L. Kamil, P. Mosenthal, & P.D. Pearson (Eds.) *Handbook of Reading Research* Volume 2 (pp. 951-983). White Plains, NY: Longman.

Overview of Contents

Authors Alvermann and Moore summarize the research on secondary school teaching interactions specific to reading. Using the overview provided in this chapter, teachers and schools can evaluate, or put into perspective, their literacy programs. This chapter provides a list of the many useful practices researched in the study. Whether a school program already uses these specific strategies, one can benefit from learning what the research says about them.

The chapter is divided into five sections:

1. A brief rationale for the special treatment of secondary school reading
2. A summary of the experimental research on teaching strategies and learning strategies for learning from text
3. An overview of actual teaching practices predominant in schools
4. An explanation as to why these practices have predominated
5. A detailed review of implications for future research

This chapter addresses the following content-focused teacher-directed strategies: guided reading and writing; directed reading activity (DRA) and directed reading-thinking activity (DRTA); questioning (placement); questioning (types, levels); reciprocal teaching; ReQuest; advance organizers; graphic organizers; structural overviews; Frayer model; ConStruct; semantic feature analysis; and use of text structure.

The following student-directed learning strategies are covered: underlining, summarizing, note taking, mapping, metacognitive training, outlining, analogy and metaphor, self-questioning, and using imagery.

• *Instructional Implications*

While one focus is on determining the extent to which literacy levels are declining at the secondary school level, it is more important to acknowledge the reality that the modern world demands increasingly skilled literacy for function and success. As the authors point out, to teach to the same absolute level of literacy year-to-year is to fall behind the demands that students will face in the workplace and society. For this reason, teachers must become increasingly skilled in teaching literacy skills. Being aware of one's instructional approach helps identify ways to better meet the needs of secondary school students.

Content-focused/teacher-directed strategies:

This chapter presents general conclusions about content-focused/teacher-directed strategies. The following practices, while valuable at the elementary school level, do not generally produce positive effects at the secondary school level, according to the research available in 1991. They include: directed reading activity (DRA) and directed reading-thinking activity (DRTA), reciprocal teaching, ReQuest, the Frayer model, ConStruct, and semantic feature analysis. Since 1991, however, a body of research on reciprocal teaching as a secondary school strategy suggests that

it can play a key role in supporting the development of adolescent reading skills (Rosenshine & Meister, 1994).

Studies show that all students, regardless of ability, benefit from using a graphic organizer. Student-made organizers for written material are more helpful for understanding text than teacher-created organizers. Typically, the students who construct their own graphic organizer are the more able students.

Using text structure to identify and comprehend main ideas is generally considered an effective strategy. However, the student's familiarity with the topic of the text (they already have a schema or supportive structure for comprehension) also plays a role. There is little difference between having readers follow the author's text structure or use aids to dissect it. For this reason, practices such as structural overviews are useful in helping students understand texts.

Typically, skilled readers benefit most from the practices studied. Regardless of reading ability, the greatest effects occur when students are actively involved in manipulating conceptual relationships and integrating new information with existing knowledge.

Student-directed strategies:

The following student-directed strategies build independence in reading and studying:

- rehearsing (underlining, taking notes verbatim)
- elaborating (taking notes by paraphrasing text, forming a mental image, creating an analogy, summarizing)
- organizing (outlining, mapping)
- comprehension monitoring (metacognitive training, self-questioning)

Of these, summarizing tends to be the most difficult strategy for students to master when they have poor writing skills, lack interest in the text, or do not know how to rank the ideas within the material. Summarizing, outlining, and mapping become easier when explicitly taught over time and scaffolded before students perform the skill on their own.

Note taking (paraphrasing from text) is generally an effective method due to the cognitive effort required to complete the task. The research on two common metacognitive training techniques, comprehension monitoring and self-questioning, indicates that the reading level of the individual influences the effectiveness of the technique. Comprehension monitoring tends to be more difficult for low-reading-level students. However, studies show that student results improve when using this technique. Studies also indicate that readers benefit more from a short introduction to, as opposed to a long focus on, metacognitive training. Self-questioning tends to support processing of text for students with lower reading skills or low verbal ability. Regardless of reading level, students are more effective at self-questioning when taught directly about the technique or given clear written instructions with good models of self-questions.

Limited research has addressed strategies to help students use analogies, metaphors, and imagery. Some studies suggest that imagery-building helps students with free recall and that mnemonic strategies improve students' recall of text. Simply telling students to visualize the text, using high image-evoking text or imagery listening guides, is ineffective.

Based on this research, those evaluating or designing instruction to address students' reading needs should consider: (1) the degree to which students are actively involved in manipulating the material to form conceptual relationships and (2) the degree to which students are demonstrating that they are integrating the new information with pre-existing knowledge. If

instruction encourages this amount of interaction with text for these purposes, then the program is more effective in building literacy skills. This is true for both teacher-directed and student-directed strategies. In order to have the most beneficial impact, student-directed strategies should be introduced and practiced over time with increasingly less teacher support. In this way, students will integrate it into their approach to text with greater independence and less prompting.

✦ *Curricular/Program Implications*

This chapter assumes that improving reading at the secondary school level is a program goal that is purposefully built into the curriculum of all of the content areas. Teachers and students should use these strategies across the curriculum. It is a program outcome for which all educators are responsible.

▲ *Structural/Systemic Implications*

All of the strategies reflect the belief that teachers create uniformly meaningful learning experiences through which students master the course material. One prevalent paradigm — a triangular relationship of content-teacher-student — places teacher and content in opposition to students. In contrast, recent thinking on this paradigm reflects the belief that teacher and students create meaningful learning experiences as they approach course material together. In this model, the teacher plays the role of expert in topic and in learning, just as a coach is knowledgeable on the sport and the best ways to train an athlete. Students inform teachers about their needs and the techniques that have worked best in the past. Teachers use these strategies to meet students' needs. Today's classrooms require both content-focused/teacher-directed instructional strategies and student-directed learning strategies that train students to be active meaning-makers of text.

The research suggests that strategies are most effective when implemented over time. Administrators should observe the use of these strategies as part of teacher evaluation and arrange for appropriate professional development. Instructional leaders should evaluate how well literacy skills are integrated throughout the system.

Despite the available research, many classrooms today show no such shifts from teacher-directed to constructivist classrooms. In many teacher-directed classrooms, reading strategies are not integrated as a regular part of instruction, even within old paradigms. Reflecting on the research findings in this chapter can stimulate teachers to make substantial changes in their current, literacy-support strategies.

■ *Professional Development Implications*

Effective professional development begins with the belief that teachers care about helping their students and improving their teaching practice and, therefore, are motivated to better meet these two goals. Harnessing the teachers' desire to make their classes more effective involves making research and new teaching strategies available. This helps establish a culture of "teachers as learners." If teachers embrace a professionalism characterized by self-generated, continuous improvement, then professional development takes a meaningful hold within a school or school system.

This approach to professional development follows from what the research describes as negative effects of limited teacher input. When teachers are actively and intimately involved in the thinking behind the instructional changes, they teach with more enthusiasm. When the teacher introduces the strategy, it is much more effective, as measured by student performance.

In the conclusion of this chapter, the authors note that a more engaging approach is employing a research methodology that actively involves teachers. Such action research helps teachers effectively implement research-based classroom practices and measure the impact on student experience and performance. Professional development should actively support teachers to change their practice based on research.

◈ *Assessment Implications*

Over time, there should be a measurable improvement in literacy skills within a class, school, or district. Assessment methods should pinpoint these improvements.

Additional Notes

Despite the fact that this chapter was written 10 years ago, much of what it advocates is consistent with more recent research. Since many secondary schools and school systems have yet to make the shifts described in this chapter, this is a good reference for those trying to determine positive initial steps. For those searching for effective methods, it identifies strategies for teaching and learning that concretely support improvement of adolescent reading skills. As researchers have developed a sociocultural understanding of reading, they have incorporated and enlarged upon the cognitive approaches described here (Bean, 2000; Wilkinson & Silliman, 2000).

Buehl, D. (2001). Classroom Strategies for Interactive Learning (2nd Edition). Newark, DE: International Reading Association.

Overview of Contents

This clear and accessible book describes a wide variety of strategies that support literacy development throughout the content areas. Buehl, a secondary reading teacher, firmly believes that reading is an interactive meaning-making process, as opposed to a set of skills to be applied to text. The book presents the theory and research upon which effective literacy strategies are based, detailed descriptions of the strategies, and practical classroom examples.

The first section presents a research-based, interactive model of reading comprehension, based on reading as an interaction between the reader, the text, and the context. Three principles summarize this process:

1. Activating and developing background knowledge prior to reading ("frontloading")
2. Fostering student motivation and engagement ("using" reading rather than "doing" reading)
3. Helping students develop cognitive and metacognitive strategies for reading.

Although it is essential to address each principle in the secondary school content-area classroom, teachers can freely select any strategy connected to these principles to match their instructional goals and student needs.

This section also includes two valuable graphics. One is a comprehensive list of secondary literacy strategies (e.g., anticipation guide, KWL Plus) categorized by student activity (e.g., brainstorming ideas, encouraging writing). The second graphic categorizes the literacy strategies by cognitive processes (e.g., preparing for learning, processing the content, consolidating learning). The book also discusses how to guide thinking using what the author refers to as "text frames" and how to help students set priorities with "fact pyramids."

In the second section, the author lists alphabetically a range of research-based classroom strategies from which teachers can choose. These strategies support students in meeting instructional goals and interacting with content more intensively. As a result, students further develop the reading, writing, speaking, listening, and thinking skills needed to learn content. Direct quotations from teachers introduce each strategy, what it addresses, and why it is needed. This section describes how to use the strategy, explains its advantages, and makes concrete suggestions for successfully managing materials and the classroom environment. Specific content-area examples are often provided. A "strategy index" points out related cognitive processes, text frames, and student activities for each strategy. Additional readings and references are noted.

● *Instructional Implications*

Because of the clarity of the descriptions and examples of how to use these strategies in the content-area classroom, teachers may see many ways to relate the ideas presented in this book to their teaching. Applying the strategies on a regular basis can profoundly shift teaching and learning from what typically occurs in most secondary school classrooms.

In this model, teachers become master strategists and facilitators, carefully matching appropriate strategies to their instructional goals and to their students' needs. They consider the order in which strategies need to be employed during a unit of study to support and scaffold reading, writing, speaking, listening, and thinking about the content. They teach or facilitate the use of the strategies as part of — not separate from — the teaching of content. They expect students to use the strategy to engage with the content at hand. Learners are actively engaged as they use a variety of strategies over the course of each week. Classrooms are bubbling with dialogue or full of focused concentration. Students are driving the investigations using the "maps" or tools provided by the teacher. As students become familiar with these tools, they use them more and more independently.

To achieve this, teachers must be clear about their targeted outcomes and select strategies to match their goals and their students. They also must reconceptualize planning to include "frontloading," ways to enhance engagement, and methods of teaching content using reading and writing. Currently, this is not the way most secondary school teachers plan their content-area teaching.

✦ *Curricular/Program Implications*

To best accommodate these strategies, teachers should structure a unit, as opposed to planning

and teaching an individual lesson or a textbook approach. Exploration of content is somewhat dependent upon student interest. These strategies lend themselves to a "fencepost" approach to the curriculum, in which students dig deeper into content at strategic points in a course of study.

▲ *Structural/Systemic Implications*

Buehl carefully describes ways that these strategies can be "inserted" into current classroom structures. For example, while use of the strategies profoundly affects teaching and learning, they do not require structural changes in the school schedule. However, classroom structures and planning must adapt to support the use of particular strategies. A block or mixed-block scheduling pattern allows more time to employ the strategies. In this way, students can deeply investigate content and develop content-area understanding.

The school schedule should allow time for teachers to discuss implementation of the strategies and for ongoing professional development. Most important, the school must reinforce an expectation of students as active learners. Otherwise, teachers have to fight against a passive culture, greatly diminishing the impact of these strategies in supporting ongoing literacy development.

■ *Professional Development Implications*

Initial professional development should introduce teachers to Buehl's conceptual framework, the strategies themselves, and how these fit together. Then, teachers should have time to meet and discuss implementation and to support one another in making changes in classroom practice. Finally, to ensure that teachers adopt these strategies as an integral part of their content-area teaching, professional development should include: action research on the impact of the strategies, collaborative examination of the quality of student work and the outcomes related to the strategies, and coaching by a professional developer or by the reading specialist.

◆ *Assessment Implications*

The strategies inherently contain ways to see what students know and can do. Therefore, they can be used for formative or summative assessment. Many can form the basis for performance assessment tasks to demonstrate student progress toward standards. Because the strategies require higher-order thinking skills, they are ideal vehicles to use in a standards-based curriculum to simultaneously build literacy abilities and content-area understanding.

Additional Notes

Teachers will find this book very accessible and practical. The tone is realistic, conversational, and persuasive. It clearly translates the research into classroom practices, describing why the strategies work and how to use them.

Pearson, P.D. & Fielding, L. (1991) Comprehension Instruction. In R. Barr, M.L. Kamil, P.B. Mosenthal & P.D. Pearson (Eds.), *Handbook of Reading Research*, Volume 2 (pp. 951-983). White Plains, NY: Longman.

Overview of Contents

This chapter draws together the research on reading comprehension instruction available in 1991. Pearson and Fielding describe several landmark publications, each of which have added dimension to the ongoing discussion of reading comprehension instruction. The authors describe important findings on reading comprehension and conclude with four models of reading comprehension instruction.

● *Instructional Implications*

The authors make four recommendations for teaching reading comprehension based on their research. These are related to the goals of comprehending expository and narrative texts.

1. Whether the focus is expository or narrative, the researchers find that students, from a variety of ages and abilities, benefit when teachers implement strategies that build recall and knowledge of text structure. Examples are: (a) using a set of questions that leads through the "story line" of a narrative, (b) creating a summary of the macrostructural relations in a textbook chapter, or (c) developing a visual representation of any section of text. All of these help students to pay better attention to the structural relationships among important ideas in the text. Through such active interaction with the text, students comprehend the material better.
2. Helping students to draw upon existing background knowledge and experiences and to connect these with text content improve reading comprehension. Whether the strategy is invoking appropriate knowledge prior to reading, making and comparing predictions before and during reading, or answering inferential questions during or after reading, access to prior knowledge supports comprehension.
3. Having students actively learn to monitor their comprehension helps students both understand and learn how to understand what they have read. Becoming more aware of the internal process of making meaning from the text supports reading comprehension and content-area learning.
4. The research shows that asking students to summarize texts, which demands making judgments about the information's relative importance, helps students to improve both comprehension and recall. Also, evidence suggests that direct teaching of summarizing helps transfer this skill to new situations.

The authors note that all of these strategies involve students in manipulating meaning by transferring the ideas from one form to another. In this transferring process, the ideas move from being the author's to being the student's. Whether students are summarizing, self-monitoring, drawing upon relevant prior knowledge, creating visual representations, or asking their own questions about text, this process of increased student cognitive involvement has a significant positive impact on reading comprehension.

✦ *Curricular/Program Implications*

This chapter opens with a summary of research in reading comprehension. Some of the research is directly applicable to improving current practice and informing curriculum and program design (see below). Despite having been conducted in the 1980s and 1990s, this research has contributed thoughtful questions that have continued to inform research over time. These questions speak directly to classroom practice and the design of curriculum or a reading program today. By considering these questions, educators can improve their curriculum and reading comprehension instruction strategy.

The Levin and Pressley research in 1981 found that previous reading comprehension instruction research had very little to do with instruction. Most often, teachers were providing opportunities for students to practice and demonstrate skill ability, with little instruction on how to improve their actual comprehension as they read. The distinction between asking students to perform tasks and teaching reading comprehension has been important. Even today, teachers can reflect on their approach to reading comprehension and ask themselves: How much instruction in reading comprehension are they providing relative to tasks for students to complete? Districts can evaluate their approach and program as to what extent teachers are instructing comprehension or eliciting skill demonstration.

From 1983 to1984, a series of reviews by Tierney and Cunningham distinguished between research that examined ways to increase comprehension of a particular piece and research that increased the student's ability to comprehend and learn from text. They questioned whether the aesthetic aspects of literature had been lost as a result of the focus on teaching systematic and sequential reading strategies. This, too, is relevant for educators today. Educators can ask: Do the methods for teaching reading foster pleasurable reading experiences and cultivate an appreciation of the art of writing?

"Becoming a Strategic Reader," by Paris, Lipson, and Wixson (1994), clarifies the differences among

- declarative knowledge, or what the specific skill is (e.g., summaries),
- procedural knowledge, or how to do the skill (e.g., summarizing), and
- conditional knowledge, or why and when to use the skill (e.g., when one would write a summary).

This distinction led to further models in which the process of acquiring a new skill started with direct instruction with more teacher support and moved into independent execution of the skill with less teacher support. Two questions facing educators today are (1) Are students asked to implement, with increasing independence from the teacher, the skills that they are learning? and (2) Are students able to transfer skill use independently to new situations?

Clearly, one key to increased comprehension is the cognitive effort required in working with text. Therefore, curriculum and programs must be evaluated as to whether and to what extent they demand cognitive effort of students.

▲ *Structural/Systemic Implications*

The role of the teacher varies depending on reading comprehension models. The authors present four models corresponding to different phases in the research.

In the traditional model, the teacher is the task director, instructing recitations, written practice, and study activities. Here, the assumption is that a single, fixed interpretation follows from the text. More recent research suggests a shift from this role to one in which the teacher delivers explicit instruction about various reading strategies, explains thought processes, and models the use of these strategies. Research points to the effectiveness of teaching students about text structures, inferences, summarizing, self-monitoring, and self-questioning. In the second model, the student uses a variety of tools to wrest the meaning from the text. While the teacher's role is central in the beginning of the process, by modeling and sharing cognitive knowledge, increasingly responsibility shifts to students. The end goal is complete independence and transfer of skills to a new context.

In the third model, teachers provide scaffolding for activities that students cannot complete on their own. The premise is that meaning is negotiated between the reader and the text. The level of scaffolding provided comes out of an ongoing, dynamic interaction with text and response to the student's needs. The research notes that the tasks and texts gradually come more and more under the student's control and that more difficult tasks and texts become an appropriate basis for further teacher-student interaction. Although the teacher is still "ringmaster" of the learning experience, there are differences, subtle but significant, between scaffolded instruction and "responsive teaching." More important, the instruction grows out of an analysis of the student's ongoing experience as much as an analysis of the text at hand. This approach presupposes multiple interpretations of text rather than an authoritative reading of the text.

The fourth model views the role of teacher as facilitator of learning and as an equal member of the classroom's literacy community. In this model, readers hold the ultimate authority and responsibility for making meaning out of a text. Teachers model and demonstrate the use of literary tools but do not demand that students utilize them. The authors note that the fourth model is the antithesis of the first model of teacher as deliverer of explicit instruction. Scaffolding instruction can bridge these widely disparate models.

Good reading comprehension promotes success throughout the schooling experience wherever written text is a medium for conveying information. Therefore, a district's evaluation of their approach to reading comprehension can have far-reaching implications. An examination of the effectiveness and assumptions underlying teaching reading comprehension can result in large-scale shifts on a district level or within a school or department.

■ *Professional Development Implications*

For a teacher and a district, the understanding of reading comprehension directly impacts the classroom. It defines the role of the teacher and affects the curriculum. Making such a shift in understanding reading comprehension and its implications on classroom instruction require professional development. Teachers need time and support as they discover what their current practices signify about their approach to reading comprehension. Professional development should help teachers evaluate the effectiveness of their current practices, using targeted questions such as those provided in Curricular/Program Implications. The school should provide the necessary time for redesigning curriculum and the support needed for making instructional changes, particularly when the changes result in teachers serving a different role than one to which they are accustomed.

◆ *Assessment Implications*

Assessments are a reflection of what is being taught. If the approach to reading comprehension is altered, the types of assessments must naturally reflect these changes.

Rosenshine, B. & Meister, C. (1994, Winter). Reciprocal Teaching: A Review of the Research. *Review of Educational Review*, 64(4), 479-530.

Overview of Contents

Authors Rosenshine and Meister review 16 studies to examine the effects of reciprocal teaching (RT) on reading comprehension. Essentially, reciprocal teaching incorporates instruction in explicit cognitive strategies into a social dialogue initially led by the teacher and gradually managed by students in a collaborative context. Developed by Palinscar and Brown, reciprocal teaching is compatible with Vygotsky's zone of proximal development, Wertsch and Stone's apprenticeship model of "proleptic" teaching, and Wood, Bruner, and Ross's explication of expert scaffolding. All these theories employ cognition as a social process by which students learn to make sense of what they have read, while working in a group setting that empowers students to ask questions and seek clarification from peers.

In these studies, reciprocal teaching takes two forms: RT-only, in which all instruction on strategies takes place within the context of the dialogues, and ET-RO, in which explicit strategy instruction precedes strategy use in the dialogues. In both, it is through a high quality of dialogue between teachers and students and among students that reciprocal teaching enhances comprehension. The reviewed studies include narrative and expository text, emphasizing that reciprocal teaching is equally useful in academic disciplines other than English language arts.

After considerable discussion on the roots of reciprocal teaching, the authors describe the studies and evaluate their methodological quality based on eight variables, which are then considered in an examination of the effects of reciprocal teaching on reading comprehension. Interestingly, few of these variables affect the findings of each study. Typically, reciprocal teaching moderately enhanced scores on standardized reading measures (most commonly the Gates-McGinitie Reading Test) with experimental groups exceeding control groups by 0.3 standard deviations. On researcher-developed instruments, reciprocal teaching groups exceeded their counterparts by 0.8 standard deviations. This pattern persisted regardless of the study, the type of students in the sample, number of strategies taught, or type of reciprocal-teaching instruction (RT-only versus ET-RO). In studies where the samples were either all students or good decoders but poor comprehenders (good-poor), the pattern of effect persisted. However, in studies of "below average" readers (where this term was not operationally defined), there was less effect on the standardized measures.

The authors also examine more complex effects including differential benefits to three categories of students, the relative benefits of the strategies used in the dialogues, the quality of reciprocal-teaching implementation, and the effects of settings (such as grade level). These more complex analyses offer greater understanding of the effects of reciprocal teaching and are a particular

strength of this review. At the end of the section is also a valuable discussion of reciprocal teaching as compared to other cognitive strategy approaches.

● *Instructional Implications*

Reciprocal-teaching instruction varies in many ways from traditional methods of reading instruction. Typical reading instruction in the 1980s emphasized minute sub-skills presumed to cohere together "automatically" to create sophisticated readers who could grasp the meanings of longer and more complex texts than were presented in reading classes. In reciprocal teaching, students learn specific comprehension-fostering strategies, which they can apply to new text within the context of dialogues between teacher and students. As originally developed by Palinscar and Brown, students learn four strategies: question generation, summarization, prediction, and clarification. Teachers may explicitly teach these strategies before engaging in dialogues or they may incorporate them into the dialogues themselves. However, the timing had no specific effect on the overall outcomes of these studies or for specific groups of students. Reciprocal teaching can be augmented with other instructional aids, such as think-aloud strategies.

The authors find that the number of strategies used (ranging in these studies from 2 to 10) did not change the fundamental effects of reciprocal teaching. The number of instructional sessions (ranging from 6 to 100) did not affect the outcomes either. Similarly, the size of the instructional group or the person providing instruction did not reduce the benefits.

Reciprocal teaching, along with similar cognitive strategy instruction, enhances "deep processing" of what students read, allowing them to make more sense of the text. Scaffolding, regardless of the prompts, is equally successful in helping students learn the strategies. Thus, the teacher's role is as the coach providing appropriate levels of scaffolding until the students acquire the skills to support each other.

✦ *Curricular/Program Implications*

Very few curricular or programmatic features are included in this review. Since expository text was examined in many of these studies, reciprocal teaching offers promise in many academic content areas where expository text is used, such as science and social studies.

▲ *Structural/Systemic Implications*

Reciprocal teaching demonstrates positive effects for students beginning in grade 4 (the usual grade for initial independent reading) through adulthood. Some of the studies addressed regular classes, presumably heterogeneous in composition, while others focused on the homogenous "good-poor" groups or groups of "below average" readers.

Implementing reciprocal teaching in classrooms involves teaching the strategies to the students and then allowing the students to practice these strategies with texts. Gradually, complete responsibility for using the strategies rests with the students. In the classroom, this requires shifting the use of instructional time from lecture or demonstration to reciprocal teaching in small groups to discuss text and content.

Since there are several variations on reciprocal teaching, teachers should agree on the particular

configuration on a departmental or school-wide basis. It is necessary to determine who is responsible for initially teaching the strategies to students. Based on these agreements, the school should allow students to transfer use of the strategies across classes and content areas.

■ *Professional Development Implications*

Because reciprocal teaching involves a significant change in the role of teachers, intensive professional development should facilitate this transition. The quality of dialogues between teachers and students is a critical aspect of reciprocal teaching. Teachers need to learn to use a variety of procedural prompts. Less successful teachers recite information about the procedural prompts in a formulaic manner, while more successful teachers engage students at the idea level and focus the dialogue on using appropriate strategies. Teachers need both grounding in the theories that undergird reciprocal teaching and guided practice in order to implement reciprocal teaching successfully in their classrooms. A reciprocal-teaching approach to professional development seems particularly appropriate.

◆ *Assessment Implications*

If reciprocal teaching is used successfully, then reading comprehension of expository content-focused text can improve. If reading comprehension improves, then students can learn more content and be more successful academically. Furthermore, students develop a set of strategies that they can use across the curriculum. Formative assessment of the implementation of reciprocal teaching can provide students with feedback on their use of the strategies. As indicated in many of the studies, the effect on reading comprehension can be measured. The truest test of effectiveness, however, is in how well the strategy supports content-area learning.

Additional Notes

Reciprocal teaching is now used in secondary classrooms across the content areas with positive effects. For a more in-depth description of reciprocal teaching as a strategy, see Palinscar & Brown (1984, 1986, 1988, 1989) in the bibliography.

Rosenshine, B., Meister, C., & Chapman, S. (1996, Summer). Teaching Students to Generate Questions: A Review of the Intervention Studies. *Review of Educational Research*, 66 (2), 181-221.

Overview of Contents

This research review examines the effects of question-generation instruction on reading comprehension, as measured by standardized and researcher-developed instruments. Question generation is one of a group of cognitive strategies designed to help readers approach less structured, academic tasks such as reading comprehension.

The authors, Rosenshine, Meister, and Chapman, describe the results of studies that compare traditional instruction (with no attention to cognitive strategies) to various types of question-generation instructional strategies. After a discussion of cognitive strategies and their rationale, the authors then explain their selection of studies (only studies with control groups and transfer measures are included) and the computation of effect sizes in the different studies.

The studies are grouped according to the type of procedural prompt that the teachers provided. Procedural prompts are designed to help the student generate questions. The reviewed studies include keyword prompts (e.g., who and what), generic question stems or generic questions (e.g., How are x and y alike?), main idea prompts, prompts that employ various question types, story grammar categories (such as setting or characters), and, lastly, no apparent procedural prompts. The authors then describe the results of the studies grouped according to types of assessment measures (e.g., standardized reading comprehension tests, researcher-developed comprehension measures, and researcher-developed summarization tests).

In summarizing these studies, the authors find that question generation resulted in comprehension gains. The effects of question-generation instruction were modest when measured by standardized measures, but were much larger when researcher-developed instruments were the outcome measures. Question generation in a teacher-directed context had similar effects as question generation in a reciprocal-teaching context (instruction where the teacher facilitates collaborative group learning among students).

The authors then compare the effects of the different types of procedural prompts, finding that signal word prompts and generic questions or question stems were generally more effective, particularly on researcher-developed measures. In comparing the studies in terms of various settings, the authors find no effects systematically affected by grade level (which ranged from grade 3 through college), by the length of the strategy training, by ability level of students in the sample, or by instructional approach (reciprocal teaching or teacher-directed instruction).

Providing procedural prompts to students, either as keywords or generic questions, is the most effective feature of the treatments employed. However, there may be limitations that are not readily apparent, including over-prompting and giving students prompts versus having them generate their own.

In the second major section of this research review, the authors identify and describe nine instructional elements critical to the success of question-generation instruction.

Instructional elements:

1. Task-specific procedural prompts
2. Models of appropriate responses
3. Anticipation of potential student difficulties
4. Regulation of difficulty in material
5. Cue cards
6. Guidance of student practice
7. Feedback and correction
8. Use of a checklist
9. Assessment of student mastery

Although no single study employs all nine, all of these elements appear in different combinations throughout the studies. These instructional elements are consistent with scaffolding and are

compatible with research on effective teaching practices. Further research is needed to ascertain the effects of different procedural prompts, task complexity, using checklists, the length of strategy training, and the effect on students of different ages and ability levels. Overall, question generation is effective in improving reading comprehension.

● *Instructional Implications*

Scaffolding is a unifying theme in these instructional treatments. Scaffolds are temporary supports provided by the teacher that are gradually withdrawn as students become more proficient and independent. Providing students with key word prompts and generic questions or question stems produces the largest effects on comprehension. Fewer studies support the effectiveness of other prompt types (e.g., story, grammar, or category prompts) or having students generate their own prompts.

One effective type of scaffold is modeling, introduced during initial instruction and reinforced during and after student practice. Teachers can provide scaffolds for anticipated student difficulties and model strategies to help students with these difficulties. Regulating the difficulty of material being read (beginning with short, simple text and advancing to more difficult and longer passages) and providing cue cards are promising scaffolding approaches. Another way to support scaffolding is to guide student practice, including both teacher-directed practice and reciprocal-teaching practice in small groups. Feedback is another important instructional element implicit in these studies. In addition, teaching how to use a checklist for self-evaluation may enhance the effectiveness of strategy instruction.

Overall, the research emphasizes the importance of teachers providing appropriate levels of support at various times in the learning process. For example, when students are acquiring proficiency, they initially need more intensive modeling and scaffolding. Teachers gradually decrease support in order to facilitate students' independence in monitoring reading comprehension.

✦ *Curricular/Program Implications*

The curriculum should offer content-focused materials that meet a wide range of reading abilities. In many ways, question generation is an extremely flexible, though limited, reading comprehension strategy because it is easily adapted to a variety of curricula already in place.

▲ *Structural/Systemic Implications*

Question generation can be easily integrated into a wide variety of classroom formats. However, setting up the expectation throughout the school that students can monitor their reading comprehension through the use of question generation is a more subtle and challenging agenda. Although an individual teacher can effectively use question-generating activities, transfer or effect beyond that classroom will not occur without a wide-scale adoption of such strategies.

■ *Professional Development Implications*

Many teachers need support as they develop the skills to pose good task-specific procedural prompts and to teach students how to ask good questions. Professional development can assist teachers in scaffolding effectively and helping students to question meaning when they read. Because a variety of strategies stimulate question generation in the secondary school classroom, teachers need guidance in selecting those that match their instructional goals and their subject area.

◆ *Assessment Implications*

Although this review does not explicitly discuss assessment, there are some clear implications for assessment practices to measure reading comprehension. Most important is the difference in the effects of question generation between standardized comprehension measures and researcher-developed tests. Upon examination of both types of measures, the authors state that the reading passages in the researcher-developed instruments was more clearly structured (in terms of main ideas and supporting detail and narrative structure) than the passages used in standardized tests. Further research studies can examine texts that are not well structured to ascertain if that would improve results on standardized measures.

Formative assessment is clearly essential during strategy instruction. Important assessment elements are (1) providing feedback and correction as teacher support diminishes and (2) teaching self-evaluative approaches such as checklists. Finally, summative assessments evaluate the students' ability to generate questions independently and comprehend reading passages.

Weinstein, C.E. & Mayer, R.E. (1986). The Teaching of Learning Strategies. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching* (pp. 315-327). New York: MacMillan.

Overview of Contents

This chapter addresses the role of learning strategies in the teaching and learning process. Weinstein and Mayer see this process as multifaceted. They consider such facets as teacher characteristics, learner characteristics, teaching strategies, learning strategies for encoding information, learning outcomes, and performance evaluation.

The authors outline five major types of strategies proven to enhance learning in both simple and complex tasks.

1. Rehearsal learning strategies
2. Elaboration learning strategies
3. Organizational learning strategies
4. Comprehension monitoring learning strategies
5. Affective/motivational learning strategies

These are mainly cognitive in nature, although comprehension monitoring is a metacognitive strategy. The authors discuss each of the strategies and offer research-based evidence of their efficacy. For the most part, explicit instruction in the strategies can enhance learning, but their effectiveness is often strongly related to developmental aspects. Other factors include the instructional content area and ability level of the students.

Many of the research studies discussed in the chapter investigate classroom interventions that include explicit instruction in one or more strategies. One limitation is that the strategies alone are not sufficient for assuring high achievement. Other determining factors include subject-specific knowledge and the effectiveness of the teachers' instructional practices.

This chapter provides excellent descriptions of the studies that address learning strategies and effective instructional approaches.

⊛ *Instructional Implications*

The authors evaluate the effectiveness of the five major types of learning strategies.

Rehearsal strategies include repeating passages aloud, copying ideas in students' own handwriting, underlining, and copying notes. Rehearsal strategies for basic tasks predominate in early elementary school years. As tasks become more complex, these rehearsal strategies can enhance recall of features in complicated reading passages.

Elaboration strategies help students to make connections between concepts. Paired association tasks, keywords, and image generation are effective when used differently at various developmental levels. Elaboration strategies for complex learning may assist students in understanding difficult texts. Experimental studies have examined the effects on recall and other aspects of comprehension of such strategies as integration, summarization, and note taking, both singly and in combination.

Organizational strategies teach students to group concepts by categories, link concepts in various ways (e.g., part to whole; evidence to support or refute), and identify various levels and types of structures in expository text.

Effective comprehension-monitoring strategies include self-monitoring, focusing attention, self-reinforcement, and self-evaluation.

Affective/motivational strategies can help students focus attention, manage performance anxiety, establish and maintain motivation, and manage time effectively. Affective strategy instructional methods can, in particular, alleviate test anxiety and thus enhance measured performance.

✦ *Curricular/Program Implications*

The authors advocate that content-area instruction must involve the teaching of comprehension strategies along with content. The balance between these two is key to effective content-area learning. This involves redefining content-area programs and learning outcomes.

▲ *Structural/Systemic Implications*

Using these comprehension strategies throughout the content areas promises substantially greater effects than if only a few teachers incorporate them.

■ *Professional Development Implications*

Professional development should allow teachers to try various strategies and then discuss their efforts with colleagues.

◆ *Assessment Implications*

Given the time period of the research cited (1970s and early 1980s), virtually all studies employ testing as their principal assessment strategy. Cloze-type tasks, reproducing lists, defining concepts, and free recall are all mentioned as measures of comprehension, although recall is the most important outcome measured in these studies. There are hints of what is today referred to as performance or alternative assessment. Think-aloud strategies are mentioned but seen as primarily a formative assessment to guide and frame instruction. Although the conceptual model includes learner characteristics, the authors do not address how to assess the interaction between the student and the information to be learned. Apart from age or developmental level, learner characteristics are mostly omitted from this chapter.

Overview of Key Component C:

Integrating Reading and Writing Across the Curriculum

Reading and Writing in the Content Areas

Research champions the explicit instruction of literacy skills in the context of the content covered in class. This is particularly true for struggling adolescent readers, including English language learners. The field of English as a second language (ESL) has long supported content-based instruction that integrates content and language as an effective strategy for improving the academic achievement of English language learners (Thomas & Collier, 1997). Ample evidence indicates the connection between increased use of reading and writing in the content areas and better achievement for all students (Mohan, 1992; Moore, et al., 2000; Peterson, et al., 2000; Reyhner & Davison, 1992; Schoenbach, et al., 1999).

As described in the previous section, there are two types of content-based literacy instruction: (1) generic literacy strategies that can be applied in similar ways across the content areas and (2) literacy strategies that differ greatly depending upon the particular subject. The second type of literacy strategy is the major focus of this section. However, because these types of literacy strategies must be used in conjunction to improve content-area learning, both types are referenced. In this way, teachers can see how to integrate both generic and discipline-specific strategies into particular content areas.

Generic Literacy Strategies

Generic literacy strategies are cognitive and metacognitive approaches shown to improve achievement in the content areas. Strategies such as concept mapping, development of Hypercard stacks, KWL, and two-column note taking can similarly increase achievement regardless of the specific content at hand. To be effective, these strategies must be purposefully selected, explicitly taught, adequately practiced, and regularly used — before, during, and after reading. All of these research-based, literacy-related strategies require students to use reading and writing to learn.

Discipline-Based Literacy Strategies

Discipline-based literacy strategies are more dependent on the particular content being studied. To optimally support adolescent literacy, content-area teachers must understand the reading and writing demands inherent in the study of their discipline. Content standards require that students know how to think like a scientist or a historian, to analyze literature, or to communicate mathematically.

The research reveals that disciplined-based literacy strategies, when used intensively and purposefully, support adolescent literacy development in almost startling ways. They have significant impact when combined with problem-solving approaches to reading comprehension and when used in context by students, including English language learners (Langer, 1999a; Mohan, 1990; Schoenbach, et al., 1999).

Three discipline-based strategies differ substantially across subject areas; these are vocabulary development, understanding text structures, and recognizing and analyzing discipline-specific discourse features.

Vocabulary development. The essence of good vocabulary instruction is creating contexts where students use relevant and key vocabulary constantly in their reading, writing, and speaking. This contrasts the ineffective, but far more prevalent, method of "assign, define, and test." Many studies show that discipline-specific vocabulary instruction has a positive effect on reading comprehension (Allen, 1999; Baker & Brown, 1984; Blachowicz & Fisher, 2000; Graves, 2000; Smith, Stahl, & Fairbanks, 1986, 1997; Baker, et al., 1995; Smith, 1997).

In each content area, good vocabulary instruction can meet many goals:

- increase reading comprehension
- develop knowledge of new concepts
- improve range and specificity in writing
- help students communicate more effectively
- develop deeper understanding of words and concepts

Understanding text structures. In different disciplines, students encounter different types of texts. Understanding text structures is an important way to increase reading comprehension of demanding content-area material. To help students to learn more from texts, instructors can teach "decoding" of discipline-specific text structures (e.g., screenplay, scientific journal abstract, marketing plan) and text features (e.g., bold or italicized print, graphics, indices, chapter headings, glossaries, hyperlinks, graphic organizers, chapter summaries, change in point of view, bibliographies). Demystifying the expository and narrative text structures specific to content areas can provide readers with frames of reference to use when interpreting new information. Strategies for unpacking text structures include: using signals for predicting; mapping; and text queries (Beck, et al., 1998; Berkowitz, 1986; Garner & Reis, 1981; Pearson & Camperell, 1994; Pearson & Fielding, 1991; Schoenbach, et al., 1999; Symons, et al., 1995; Taylor, 1992).

Recognizing and analyzing discourse features. Discourse is the language used to discuss important concepts within a culture. In a sense, different content areas represent different cultures of teaching and learning (Gee, 2000). The meanings of central concepts (e.g., research, discussion, graphic, argument, evidence, problem solving, conclusion) differ in significant ways throughout the disciplines. Accordingly, the conventions of discourse also vary. The conventions are the formats used to discuss and present important information in different content areas (e.g., debate, presentation of a geometric proof, historical reenactment, scientific hypotheses). Furthermore, when reading, writing, or speaking in a content area, one needs to know aspects of discourse (e.g., the criteria for documentation, specificity, punctuation, format, and approaches to analysis.)

Being able to recognize and analyze discourse features aids tremendously in content-area understanding and content-focused writing (Langer & Flihan, 2000; Schoenbach, et al., 1999). Explicit teaching of the discourse features, particular to specific content areas, is especially important for English language learners and students coming from limited literacy backgrounds (Mohan, 1990; Reyhner & Davison, 1992; Spanos, 1992).

What Teachers Need to Do

The research emphasizes the need to effectively infuse all content-area instruction with literacy strategies for all students, not only for "special" learners. Thus, all students can consistently use reading and writing to maximize content-area achievement. To accomplish this, secondary school teachers need to reflect on how they can support the ongoing development of adolescent literacy as an integral part of content-area teaching and learning.

Implementing these strategies effectively is a major challenge for teachers, many of whom have not had sufficient professional development in content-area reading. Teachers need to first understand these strategies, see how they can be specifically applied to their content area, and then modify their classroom practices to incorporate the strategies into everyday teaching and learning.

Overview of Section

In this section, the resources reviewed focus specifically on the incorporation of the two types of literacy strategies, generic and discipline-specific, into the middle and high school classroom. The resources provide content-related examples enabling teachers to visualize what the strategies look like in practice. Two of the reviewed resources specifically describe English classrooms that effectively support literacy development. Many of the scenarios described in these classrooms can relate to other content-area classrooms as well.

Several other related resources are reviewed elsewhere in this book (see below) and listed in the bibliography. In addition, the Internet has become an invaluable source for finding descriptions of literacy strategies and examples from content-area classrooms. Many excellent links to resources can be found in the Adolescent Literacy in the Content Areas Spotlight on The Knowledge Loom Web site (www.knowledgeloom.org).

Note: Related resources, reviewed in other sections, are listed below. (See the Table of Contents to find the full review.)

- *Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms*
- *Struggling Adolescent Readers: A Collection of Teaching Strategies*
- *You Gotta BE the Book: Teaching Engaged and Reflective Reading with Adolescents*
- *Classroom Strategies for Interactive Learning*

Allen, J. (1999). Words Words Words: Teaching Vocabulary in Grades 4-12. York, ME: Stenhouse Publishers.

Overview of Contents

In this concise work, Allen presents a set of research-based instructional strategies to improve students' understanding and use of content-area vocabulary. Her examples show how to teach vocabulary in ways that enable students to use those words in their speaking and writing. The book addresses the following concepts in developing content-area vocabulary:

- activating and building background word knowledge
- making word learning lasting and meaningful
- building concept knowledge
- using word and structural analysis to create meaning
- using context as a text support
- making reading the heart of vocabulary instruction

Allen asserts that the connection between reading comprehension and word knowledge is clear. Therefore, in order to strengthen reading comprehension, it is vital to develop word knowledge across the curriculum. This book also provides graphic organizers to scaffold the lessons and illustrate the principles and scenarios discussed.

● *Instructional Implications*

Allen outlines the research that compels a departure from the ineffective practice of "assign, define, and test." She maintains that the language that students use is the language that they remember and add to their working vocabulary. Therefore, the essence of good vocabulary instruction is to create contexts in which students work with relevant and key vocabulary constantly. This active use of words leads to what Allen calls "concept-based, multilayered knowledge of words." All teachers must foster a language-rich environment where lots of reading, talking, and writing occurs, regardless of content area. But more specifically, all content-area teachers should plan focused vocabulary instruction. This can accomplish the following instructional goals:

- increase reading comprehension
- develop knowledge of new concepts
- improve range and specificity in writing
- help students communicate more effectively
- develop deeper understanding of words and concepts

Allen discusses different levels of word knowledge that dictate which instructional strategies to use. For example, some concepts must be thoroughly understood in order to truly learn particular content. In other cases, knowing the gist of the word is sufficient. Allen provides different kinds of word learning strategies to meet these different instructional goals. Strategies requiring substantial processing and interaction are reserved for those key concepts that capture the meaning of a unit of study. Many of the strategies described help less skilled readers develop the "word attack" skills of more proficient readers. She also discusses some of the benefits and limitations of using context as a comprehension strategy, and she distinguishes between "rich" and "lean" contexts. The appendix provides a useful set of graphic organizers.

◆ *Curricular/Program Implications*

As Allen says:

> None of the strategies in this book, nor all of them combined, will take the place of the wealth of words learned in a strong reading program that includes time for you to read to your students, time for them to read with you and other students, and time for them to read self-selected books independently. This reading forms the larger context for any word study a teacher may choose to do. (Allen, 1999)

▲ *Structural/Systemic Implications*

All the various strategies in the book are accessible. However, because these strategies represent new approaches for many teachers and students, teachers need more planning time to integrate word play and word investigations into content-area studies. Systemically, schools must increase reading time and require students to be accountable for their reading, or vocabulary will not improve.

■ *Professional Development Implications*

Many teachers have not worked with vocabulary in the ways described, nor do they possess the necessary repertoire. Because the strategies themselves are not difficult to understand, professional development should offer practice, discussion, and support more than extensive training. Study groups or action research groups are effective professional development strategies for enhancing teacher knowledge and skills.

Inherent in using these strategies successfully, however, is the assumption that teachers know the vocabulary and concepts particular to their content area. Furthermore, teachers must be able to "rate" the centrality of these words and concepts in order to select appropriate strategies. Professional development should support teachers in making good choices in this area.

◆ *Assessment Implications*

To assess vocabulary development directly, the graphic organizers can help determine how deeply students have understood a content-based word, phrase, or concept. When assessing the ability to use vocabulary and understand words and concepts, specifically designed questions can help evaluate content understanding. These assessment questions can include vocabulary to determine comprehension of a concept, either orally or in writing. Improved performance on content-area assessments is directly related to retention of content and versatility with content-based vocabulary.

Alvermann, D.E. & Phelps, S.F. (1998). Content Reading and Literacy: Succeeding in Today's Diverse Classrooms. Boston: Allyn & Bacon.

Overview of Contents

In this book, Alvermann and Phelps summarize key elements of social, personal, metacognitive, and cognitive issues in literacy. Examples, drawn from a wide range of subject areas, illustrate key points. The strength of this text is in the focus on reading development. Teachers can apply these reading development techniques when using text (verbal or visual) to communicate understanding and to promote thinking. Of particular interest, the concluding chapter theorizes on how personalizing professional development can indoctrinate the ideas encompassed in the book. With its concise summaries and range of practical examples, this book is a good supporting resource for schools and districts currently evaluating their structure, effectiveness, and use of resources.

- ***Instructional Implications***

The authors assert that providing choices on what to read, which activities to complete, and the timelines in which students work can positively impact the students' experiences with text. These methods provide personal connection and increase student involvement. Students become motivated to develop their literacy skills in order to succeed in class.

The authors discuss the pros and cons of grouping students by ability and other methods of grouping students (e.g., cooperative learning, cross age tutoring, and discussion groups). The book delineates three strands of ability grouping: curricular tracking over a series of years, ability grouping for a particular class based on past performance, and grouping within a class for skill level relating to a specific task. The authors address how each method of grouping impacts students. Ability grouping is at the heart of beliefs about students and their ability to learn, including the degree to which students are considered capable of developing literacy. As such, ability grouping has a significant impact on building student literacy skills. Research shows that lower tracked students, whether for a particular course or sequence of courses, are not challenged in the same way as upper tracked students. Historically, higher tracked students are mandated to develop their critical-thinking skills, whereas lower tracked students are required to recall factual information.

In terms of presentation, the way in which teachers frame homework affects how students approach the assignment. When teachers communicate that an assignment is "a practice assignment," "a preparation assignment," or "an extension assignment" (moving beyond factual awareness to synthesis of material), students develop a sense of the relevance and purpose of the assignment. For example, labeling the assignment "to read these chapters as preparation for a class discussion on character development" has more importance than merely assigning students to read those chapters for homework.

Most important, this book explores a variety of instructional strategies to support literacy. In particular, these involve building reading skills within a framework containing the following four elements:

1. Preparing
2. Reading to learn
3. Vocabulary and conceptual growth
4. Reflecting on reading

The authors share many specific techniques for supporting students, along with detailed examples, which, if employed, significantly impact instructional technique. These chapters are summarized below.

"Preparing to Read"
Support of pre-reading dramatically alters a student's experience of a text. With proper preparation, a student can become more motivated, have a clearer sense of purpose, and develop greater confidence in approaching the text. Pre-reading jumpstarts the reading process. Instructional techniques, such as understanding the role of prior knowledge, knowing how to assess and build prior knowledge, and being able to activate prior knowledge through pre-reading guides, are detailed in this chapter.

"Reading to Learn"
Often teachers at the secondary level do not know how to help students build meaning as they read. Beyond the task of building vocabulary and posing questions to help students synthesize ideas, many teachers need support in more progressive techniques. This chapter outlines a framework for helping students effectively use reading to learn. The framework addresses how students learn, how to ask questions that help students to learn, how to sense and respond to text structure, how to construct meaning within a text, and how to integrate other language processes (listening, speaking, reviewing, and summarizing). This chapter presents thorough examples of these techniques in action.

"Increasing Vocabulary and Conceptual Growth"
This chapter presents various approaches to teaching vocabulary and concepts more effectively. Particularly in content-area texts, where many words are unfamiliar or familiar words are used in new ways, students need support in building vocabulary and conceptual understanding. This chapter explores what the research says about how students learn vocabulary, how to teach vocabulary, how to reinforce vocabulary, and how to develop a student's sense of independence in reading text with challenging vocabulary and concepts.

"Reflecting on Reading"
The research recommends using class time not only for exposing students to text and building comprehension skills, but also for having students reflect on what they have read and understood. This use of class time presents a challenge to curriculum design, especially given increasing content-area demands by local and state education standards. However, this book points out that developing critical-thinking skills is more valuable than gaining mere factual knowledge. More and more, national assessments reflect this belief and evaluate the thinking process rather than information recall. These abilities — to think beyond the text and to express ideas through writing — are demanded more and more in the workplace. This chapter explores various strategies for reflecting on the reading process: promoting discussion and reflection, guiding student reflection, and writing as a method of reflection.

✦ *Curricular/Program Implications*

The understanding that literacy is essential to content mastery, regardless of subject matter, affects the curriculum of all content areas. To maximize learning, the curriculum of all content areas must include specific literacy building skills (e.g., methods for constructing meaning from text) and activities (e.g., writing as a means to reflect on the reading experience).

The curriculum must expand to include information and activities that explicitly support students in learning to think well. The emphasis is less on the mastery of information measured by a recall-based assessment and more on learning how to use one's mind well, to synthesize and analyze skillfully. This affects the current practice of using class time primarily for exposure to subject matter.

▲ *Structural/Systemic Implications*

In a classroom where students are focusing on using their minds well and building literacy skills to better access subject material, the teacher's role necessarily changes. One method for building reader engagement is giving students choice and voice in the classroom. To make this shift to class power shared by teacher and students, teachers need school-wide and district-wide support.

Most significant, this book reflects the belief that all teachers should instruct literacy skills, not only English or language arts teachers. The techniques described are not limited to a language classroom and apply to using any text (verbal or visual) to learn a concept and to communicate understanding.

Systemically, districts and schools should build consensus among faculty to affirm that teaching literacy skills will help students master concepts better and more quickly in all subjects. Without this shared belief, teachers may resent having to do this work, particularly if already burdened by the local and state demands on curriculum content.

■ *Professional Development Implications*

The authors believe that professional development is a lifelong endeavor that can take many forms. The chapter "Personalizing Professional Growth" presents four models of professional growth: the parachute model; the teacher-as-learner model; loosely knit professional alliances (such as writing groups or a mentoring structure); and professional development schools.

The parachute model depicts the professional growth, however limited and archaic, that many secondary school teachers experience. The authors contrast this model to three alternative models, which offer teacher empowerment and professionalism. The summary of all four professional growth models provides a good starting point for discussion among teachers, principals, and superintendents. They can learn about the foundation for these models, reflect on their own model for professional growth, and identify the characteristics that they would like to cultivate in their school or district.

In addition to delineating these models, the authors identify two methods for empowering teachers within their professional development activities. One is action research in which teachers self-

evaluate their instructional process in facilitated dialogues, and the other is collaborative research, in which teachers work together with teacher-researchers from a university. Both of these methods can focus discussion on literacy issues. For example, a teacher can tailor a focus question to be as basic as, What methods can I use in my classroom to build vocabulary? Or, a teacher can initiate a discussion on something more complex, such as, How does the use of reading across the curriculum impact school-wide literacy achievement?

Not only are teachers expected to be an expert in a particular subject area but also in learning and reading comprehension. Professional development should support teachers as they shift their role from the classroom teacher and content expert to literacy coach in the content areas. This can include professional reading, observations, modeling, and shared problem solving among teachers making this transition.

◆ *Assessment Implications*

This book offers a summary of the variety of assessment practices used in schools today and provides discussion on some key issues raised in student assessment. The authors believe that good assessment is characterized by the following five points.

1. Draws on multiple sources of information
2. Results in information that is useful to both students and teachers
3. Gives students optimal conditions for showing their capabilities
4. Involves students in self-assessment
5. Admits the potential of fallibility

This book suggests using a variety of methods to assess student achievement. Each of the following assessments provides a window into a student's literacy skills: standardized tests, authentic assessment, performance assessment (including portfolio assessment), and national assessments.

Standardized tests are one method that many schools rely on to indicate progress in literacy skills. The authors discuss standardized tests in light of six qualities: validity; credibility; time; influence on curriculum and teaching; teacher knowledge and training; and equity. Considering these qualities can help a school evaluate whether a standardized test is the best primary method for assessing students' literacy skills.

The section on grading includes a discussion of objectivity and teacher judgment and also explores the relationship between rigor and equity (being tough, but fair). The authors ask, "How can the assessments of literacy avoid being mired in teacher judgment and rest in sound indications of student progress? How can an assessment in literacy maintain rigor while providing equity for students?"

The discussion on assessing textbooks uses a framework that considers content, format, utility, and style. This framework can help school staff when considering a new textbook or evaluating the effectiveness of a current textbook. The appropriate selection of texts is an important way to meet students' literacy needs.

Evaluating the assessment models employed within a school is important when focusing on literacy development. The five belief statements on good assessment listed above can serve as a reference when school staff evaluates their current literacy assessments. Are multiple methods for evaluating student literacy skills used? Are the ways that students' literacy skills are evaluated meaningful for both teachers and students? Are students given optimal conditions to show their

abilities? Are students involved in assessing their own literacy skills? Is there the awareness that the methods used for assessing literacy may not be flawless?

Additional Notes

Although these practices have great implications for literacy development, an elaborate discussion of the direct impact of the literacy practice is not always present. For example, in the section on professional development, the reader must make the connections to practice.

Generally this book provides succinct, accessible summaries of many of the practices currently discussed in education circles and is a good resource for a school or district exploring school change.

Reading groups can take note of which chapters address topics of interest, as follows:

- Social/personal issues relevant to literacy are discussed in the chapters entitled: "Language, Diversity, and Culture" and "Creating a Favorable Learning Environment."
- Metacognitive/cognitive issues are addressed in the chapters: "Preparing to Read," "Reading to Learn," "Increasing Vocabulary and Conceptual Growth," "Reflecting on Reading," "Studying and Learning Through Inquiry," and "Developing Lifetime Readers."
- Examples from subject areas are predominantly within chapters entitled: "Content Literacy and the Reading Process," "Planning for Content Literacy," "Assessments of Students and Textbooks," and "Literature in Content-Area Classes."

Graves, M.F. (2000). A Vocabulary Program to Complement and Bolster a Middle-Grade Comprehension Program. In B.M. Taylor, M.F. Graves & P. Van Den Broek (Eds.), *Reading for Meaning* (pp. 116-135). Newark, DE: International Reading Association & Teachers College Press.

Overview of Content

Graves begins this chapter by highlighting how the knowledge of words and the ability to use language are essential for success in school activities. The chapter details a program that has the following four components:

1. Establishing wide reading
2. Teaching individual words
3. Teaching strategies for learning words independently
4. Fostering word consciousness

The program's goal is to support comprehension and content mastery through vocabulary building, as opposed to focusing on building vocabulary as an end in itself.

● *Instructional Implications*

The author maintains that most vocabulary is acquired through reading, not direct instruction. Building vocabulary in this way involves reading a wide range of text. In short, increasing reading naturally increases vocabulary. Teachers purposefully select the vocabulary that they are going to teach. This does not only involve making a list of words viewed as difficult for students; rather, teachers should create these lists with students. In this way, the teacher's perception more accurately reflects students' experiences.

In this program, the strategy for teaching a word's meaning dovetails with other reading comprehension strategies. Strategies such as inferring meaning based on context or decoding a word's origin or "make up" can lead to more easily learning related words. Whether the word represents a new concept determines the depth of strategies needed. If students are already familiar with the concept, but not the word, teachers should use the least time-consuming method. If the concept and the word are new, teachers can select more extensive methods. These strategies are: defining, using and showing examples, distinguishing these from non-examples, and having students demonstrate their understanding of the concept. In addition to teaching the words themselves, teachers should teach word-learning strategies.

✦ *Curricular/Program Implications*

In this program, teaching individual words is not the only aspect of vocabulary building that is part of the curriculum. Teachers explicitly teach students strategies for learning words. This chapter details three such methods: using context to infer meaning, using word parts to arrive at word meanings, and using dictionaries to learn or verify word meanings. Of these three, inference is the most important, although research does not indicate which is the most effective method.

Teachers need to recognize the difficulty of teaching inference and of having students generalize reading strategies beyond the immediate task at hand. To compensate, they can employ direct explanation, model the strategy, and provide scaffolding. To be successful, teachers begin with simplified material to support understanding and maximize initial success. Some methods are using concrete prompts specifying steps for context clues, coaching with verbal prompts, and completing part of the task for students when initially modeling the strategy.

Combining these strategies can create a culture of word consciousness. To help students develop adept diction, teachers can use modeling, recognition, word play, and attention to diction in students' speech and writing.

The author estimates that implementing these four components — wide reading, teaching individual words, teaching strategies for learning words independently, and fostering word consciousness — only will take approximately one hour of school time per week.

▲ *Structural/Systemic Implications*

Increased reading as a means to build vocabulary must be a "policy in action." Substantial change in the time spent reading is not going to happen by merely stating this as a goal. To achieve increased reading time, sustained silent reading must be structured into the school experience. In order for sustained silent reading to take hold, the teacher must read along with

the students and avoid sending the message that the teacher has more important things to do than read. Teachers need to model enthusiasm by reading with students, encouraging reading outside of school, and involving other caregivers, such as parents, in supporting reading.

Encouraging wide reading implies the availability of attractive reading materials. Schools must augment the range and the amount of written materials available to students in classrooms and libraries. The author explicitly points out that this ongoing priority must be included as a routine budget item.

■ *Professional Development Implications*

Professional development should model explicit teaching strategies for learning words, particularly for teachers who are unfamiliar with strategies such as using inference to build understanding of a word.

To increase student interest and participation in reading, teachers need to identify and use sources for high-quality children's books. This chapter lists several of these resources.

◆ *Assessment Implications*

The assessment of student vocabulary is not explicitly discussed in this text. However, mastery of individually taught words is easily demonstrated by a traditional vocabulary quiz or similar testing method. Early in the process, this determines a student's familiarity with words and concepts embedded in words. Teachers can assess the integration of the words into discussion and writing through performance tasks.

Administrators can assess this model or its components by analyzing over time the verbal and reading comprehension scores from standardized tests. Also, assessing the program's impact can include observations of shifts in attitude within the school culture and in student behavior regarding word learning and reading.

Langer, J. (1999a). Beating the Odds: Teaching Middle School and High School Students To Read and Write Well. Available: http://cela.albany.edu/eie2/main.html

Overview of Contents

In this study, Langer investigates the characteristics of instruction that accompany student achievement in reading, writing, and English. Langer summarizes the theoretical framework that anchored the study and relevant research "lenses" related to the findings. The study itself is then presented with a focus on methods, analysis, and findings. When discussing each finding, examples from observed classrooms illustrate important points. This enables the reader to clearly understand why the practice described is good and how it is different from what typically occurs.

The study focused on English language arts programs in schools that have been trying to increase student performance. Taking place in four states, the study included 25 schools, 44 teachers, and 88 classes over a 2-year period. Although the sample was diverse, including urban and suburban sites, schools with poor and diverse student bodies predominated. The study compared schools whose students perform better than demographically comparable schools and schools whose scores are more typical. Langer found that six features marked distinctions between higher and more typically performing schools.

Features of higher performing schools:

1. Instruction in the knowledge and conventions of English and high literacy take place as separated, simulated, and integrated experiences.
2. Test preparation encompasses the underlying skills and knowledge needed to do well in coursework and on tests and is integrated into the ongoing class time as part of the English language arts curriculum.
3. Overt connections are constantly made among knowledge, skills, and ideas throughout lessons, classes, grades, and both in-school and out-of-school applications.
4. Teachers explicitly instruct strategies for thinking about ideas and completing activities.
5. Even after achievement goals are met, teachers move beyond immediate goals to deepen students' understanding and develop their ability to generate ideas.
6. Instructors teach the content and skills of English as a social activity, in which collaborative discourse promotes depth and complexity of understanding and proficiency in using conventions.

While some of these features were present to varying degrees in the English programs in more typical schools, they were all present all of the time in the higher performing schools, forming a consistently supportive environment for student learning. A table illustrates how these six features are different in the higher performing versus the more typical schools. This table can be an effective tool to promote discussion among teachers and administrators.

Langer argues that "high literacy" or "the literacy gained from a well-developed middle and high school English curriculum" is the ultimate goal.

> While basic reading and writing skills are included in this definition of high literacy, also included are the ability to use language, content, and reasoning in ways that are appropriate for particular situations and disciplines. Students learn to 'read' the social meanings, the rules and structures, and the linguistic and cognitive routines to make things work in the real world of English language use; and that knowledge becomes available as options when students confront new situations. This notion of high literacy refers to understanding how reading, writing, language, content, and social appropriateness work together, and using this knowledge in effective ways. It is reflected in students' ability to engage in thoughtful reading, writing, and discussion about content in the classroom; to put their knowledge and skills to use in new situations; and, to perform well on reading and writing assessments including high-stakes testing. (Langer, 1999a)

● *Instructional Implications*

All of the findings have distinct instructional implications. Most important, in order to "beat the odds," it is not enough to have some of strategies in place some of the time. Rather, all six features must be in place all of the time, as in the English language arts classrooms observed in the higher performing schools.

In the study, skills instruction by more successful teachers differed markedly from that of the more typical teachers. More successful teachers used a systematic combination approach, what Langer calls "separated, simulated, and integrated" skills instruction, as opposed to the more typical teachers who primarily used one approach.

Similarly, more successful teachers integrated test preparation into their teaching through analysis of test demands and a focus on knowledge and skills in the context of teaching and learning the content at hand.

More successful teachers made three types of overt connections on a regular basis: connections between concepts and experiences within lessons; connections across lessons, classes, and grade levels; and connections among knowledge and experiences gained both inside and outside of school.

All of the more successful teachers taught cognitive and metacognitive skills explicitly, in contrast to only 20% of the more typical teachers. The more successful teachers provided models, lists, and evaluation rubrics to help students understand important concepts and requirements. These teachers also discussed possible strategies for approaching new tasks and provided students with reminder sheets. More than mere procedural direction, this included specific instruction, practice, and the expectation that the strategy would become part of each student's learning repertoire.

While more typical teachers focused on attaining immediate learning goals, the more successful teachers focused on developing deeper understandings that could be applied in future learning. This is important since the excuse for focusing on short-term goals is often "coverage." One of the ways the more successful teachers achieved this deeper understanding was through purposeful structuring of collaborative learning. More than just putting students into working groups, the expectation was that students would challenge one another, try out ideas, and grapple with content together.

✦ *Curricular/Program Implications*

The study's findings support the explicit teaching of cognitive and metacognitive learning strategies in the context of content-area instruction. This study did not find separate skill instruction to be connected to high student achievement; instead, it found that teachers who integrated skills instruction and test preparation within their content-area instruction were more successful at promoting student success. This finding directly contradicts the practice of many schools to adopt a separated-skills approach or curriculum (e.g., workbook, set of exercises) that in effect drills students in specific skill sets or prepares them for mandated tests. Rather than providing students with separate practice test materials, the more successful teachers analyzed the test demands and integrated teaching toward those skills and content during their content-focused instruction. More successful teachers determined areas in which students needed practice,

selectively used practice materials, and then ensured that students used those skills in context. The study's findings indicate the success of ongoing attempts to connect the learning at hand to real life and other content areas, as well as to relate skills and knowledge gained to opportunities for experiential learning. This result argues convincingly against the type of "lock step" curricula that is often put into place to "rescue" poorly performing schools.

▲ *Structural/Systemic Implications*

In more successful schools, the classroom organization supported students working "together to develop depth and complexity of understanding in interaction with others." This is in direct contrast to the more typical classrooms where students tended to "work alone, in groups, or with the teacher to get the work done, but do not engage in the rich discussion of ideas." Students in the higher performing schools were regularly writing, reading, and speaking as they "explored their understandings, prepared presentations, and polished final products."

While there were more successful teachers in typically performing schools, they (and their instructional approaches) were not the norm. In contrast, in schools that "beat the odds," all the teachers exemplified the findings of effective teaching over 2 years. Langer notes that, "Although each of the higher performing schools had its own distinctive emphasis, all were marked by active and engaged students and teachers in academically rich classrooms." To make a systemic difference, most teachers should be implementing these effective instructional practices and facilitating the classroom learning environments described in the study's successful schools.

Langer observes that in the more successful schools, teachers had a collective belief that students can be enthusiastic learners, that all students can learn, and that teachers can make a difference. Systemically, this was not the case in the more typically performing schools.

Although there was remedial support available in many of the schools, this was not enough to turn a typical school into one that succeeds. According to Langer, the "overriding contributor to success was the whole-scale attention to students' higher literacy needs and development throughout the curriculum, which shaped what students experienced on a day-to-day basis in their regular classrooms." This requires sustaining leadership, vision, ongoing professional development, materials, resources, and a collective belief in student success. Indeed, Langer's study of teachers' professional contexts (see Langer, 1999b) directly indicates that it is "the larger educational system within which decisions are made and goals are set that affects how teachers behave and grow as professionals and thus create educational cultures within which students learn." The culture of the more successful schools, while individually quite distinct in terms of the particular manifestations of the six features, were all united by vision, support, belief, high expectations, invitation, and opportunity. The result is a school that "beats the odds" but also one which "feels good from the moment you enter the doors."

■ *Professional Development Implications*

Langer does not discuss professional development implications in this report, although she discusses this extensively in a related study: *Excellence in English in Middle and High School: How Teachers' Professional Lives Support Student Achievement* (see the bibliography). She does say, however, that supporting the development of "high literacy" in "beating the odds"

schools involved "concentrated efforts on the parts of teachers to offer extremely well-conceived and well-delivered instruction, based on identified goals about what is important to be learned." This kind of instruction is based "on an essential understanding of how the particular knowledge and skills identified as learning goals occur and are carried out in the carrying out of real literacy activities." Therefore, one can hypothesize that professional development and professional communities that help teachers develop and sustain this sophisticated form of "high literacy" instruction is different from the professional support existent in more typically performing schools.

This is exactly what Langer found to be the case in her study of the characteristics of teachers' professional lives that accompany student achievement in reading, writing, and English (see Langer, 1999b). A 5-year study of both professional and classroom communities sought to identify characteristics in teachers' professional lives that accompanied higher student achievement. Analyses of patterns across cases indicated six features that permeated the more successful schools, yet were not present in the more typical schools. The more effective schools and districts did the following:

- orchestrated coordinated efforts to improve student achievement
- fostered teacher participation in a variety of professional communities
- created structured improvement activities in ways that offered teachers a strong sense of agency
- valued commitment to the profession of teaching
- engendered a caring attitude to colleagues and students
- fostered a deep respect for lifelong learning

These characteristics were pervasive across levels, in the ways central administrators and classroom teachers lived their professional lives and as evidence of professional excellence.

Therefore, the professional development activities and the professional contexts experienced by more successful teachers in more successful schools were quite distinct from their counterparts in more typical schools. Professional development influenced their understandings of effective teaching and learning, efficacy, professionalism, mission, professional goals, and support structures.

◇ *Assessment Implications*

Test preparation needs to be embedded into teaching and learning, not for its own sake but for the purpose of helping students learn knowledge and skills. Students in the more successful schools scored better on standardized tests than did their counterparts at similar schools. This correlation of "higher literacy" abilities with improved student outcomes indicates that students need literacy development, not just basic skills, to improve content-area achievement. Furthermore, schools that have been hesitant to adopt these strategies because of the implied systemic changes can no longer claim lack of proven effectiveness. Langer's study shows that effective support for ongoing literacy development at the middle and high school level translates to higher content-area achievement.

Additional Notes

Langer herself notes that this is a correlational study. While strongly suggestive of causality, it is

an observational study situated within a limited and complex context of school culture, and therefore it cannot prove causal links between this set of identified instructional practices and higher student achievement. It does, however, make an important contribution to the field by indicating strong connections well worth further exploration. As Langer states, "Thus, the findings provide us not only with a vision, but also a set of principles and an array of examples to use as guides in re-visioning effective instruction." Langer's findings are highly consistent with other research in the area of secondary school literacy support.

Simonsen, S. & Singer, H. (1992). Improving Reading Instruction in the Content Areas. In S.J. Samuels & A.E. Farstrup (Eds.), *What Research Has to Say About Reading Instruction* (pp. 200-219). Newark, DE: International Reading Association.

Overview of Contents

In this book, Simonsen and Singer explore the notion that content-area teachers should supplement their lessons with developmental reading instruction. Teachers can support the learning of course content through four strategies:

1. Selecting comprehensible books
2. Giving students information about a subject before they read
3. Teaching vocabulary from the texts
4. Providing clear, understandable goals to guide reading

Additionally, these methods do not require particular expertise to be used effectively.

This book uses examples from social studies, science, and music to illustrate applications to a range of content areas.

Instructional Implications

According to the authors, the teacher's role is not only to select and assign texts, but also to support students in comprehension of the text. If students are better supported in their reading strategies, students can use reading to learn. If students can become effective readers, teachers are less drawn into using methods (such as audio or video) that do not develop all of the necessary literacy skills. Teachers should incorporate the idea of explicit reading support into the concept of their classroom role and infuse appropriate methods into their content-focused classes (e.g., prepping students with knowledge, building vocabulary from the text, and establishing clear reading goals prior to reading.)

Curricular/Program Implications

Learning how to select appropriate texts affects the curriculum. If teachers understand what qualities make texts accessible to readers at different levels, then they will select materials better suited to their students. When considering readability, teachers should consider not only sentence

and word length, but, more importantly, whether texts elaborate on information, use cohesive ties, and have pre-reading guides. Because these characteristics influence reading comprehension more than word or sentence length, teachers should select texts by analyzing these characteristics.

▲ *Structural/Systemic Implications*

Structurally, the teacher becomes not only an expert on a given subject, but also on how to access information on the subject from text. In effect, assuming this role restructures the classroom.

■ *Professional Development Implications*

Teachers in all content areas should be aware of how a student's comprehension of the subject is affected by his or her reading skills. Teachers need support in shifting to a new paradigm, in which they, regardless of their discipline, are responsible for teaching literacy skills. Professional development should highlight the research that supports this shift in thinking, model successful strategies for teachers to implement, and support teachers in monitoring the improvement in content mastery as a result of using reading strategies. To design assessments that accurately reflect the mastery of the material, teachers need clarification, modeling, and preparation time.

◆ *Assessment Implications*

The model reflects the understanding that students actively build meaning out of text in relation to their previous knowledge structures (or schemata). A student's understanding of the goal for reading the text determines which strategies they use for reading. For example, students who are tested in retention of factual information implement the strategy of skimming for facts. In contrast, students who are assessed in an essay exam read more slowly and thoroughly to draw inferences as they read.

Teachers should reflect on whether their assessment methods accurately embody the learning goals for their content area. By understanding how a student's reading approach changes based on the goals of the assessment, teachers can alter their assessments to more accurately challenge students to master the content. This book includes a helpful table of verbs for writing instruction objectives; this can help teachers to more accurately choose the words that describe the cognitive task assigned to students.

Smagorinsky, P. (1996). *Standards in Practice: Grades 9-12. Urbana,* IL: National Council of Teachers of English.

Overview of Contents

This book is the fourth in a series requested by English teachers around the country who participated in the development of the NCTE/IRA (National Council of Teachers of English/

International Reading Association) standards for the English language arts. The book contains a list of the 12 NCTE/IRA standards and five illustrations of teachers and students using the standards to develop the literacy skills necessary to pursue life goals and to participate fully as informed, productive members in society.

In this book, Smagorinsky illustrates ways that teachers can incorporate academic standards into learner-centered pedagogy responsive to the particular learning context. NCTE/IRA does not intend to give prescriptions for curriculum and instruction that can be dropped into any situation irrespective of the particular constraints and possibilities. Rather, teaching and learning are shaped from being "nested" in contexts that include schools, communities, states, and nations.

Rather than shying away from the complexity of the actual teaching experience, this book accurately portrays the challenges and celebrations within the teaching and learning experience. Following each illustration is a thorough reference list categorized by aspects raised, which can aid teachers who want to explore these aspects further.

Race, class, and ethnicity are particularly emphasized in this book. Aimed at an audience of English teachers, the book uses English classroom examples only.

○ *Instructional Implications*

This book covers the following instructional strategies: learner-centered instruction; the practice of not teaching grammar separate from sentence manipulation; multiple intelligence theory; student portfolios; the process approach to teaching writing; reader-response theory; reading and writing workshops; the use of scaffolding; the student- and teacher-centered instruction continuum; teacher research; heterogeneous and homogeneous grouping; writing across the curriculum; the use of writing to learn; and the controversy within English teaching circles about the use of young adult literature (YAL) versus canonized classic texts.

This book emphasizes current perspectives on how best to teach English and literacy according to the NCTE/IRA. It offers an inside view of teachers struggling with how to teach language use and appreciation.

✧ *Curricular/Program Implications*

The NCTE/IRA standards are presented as a list, even though one standard cannot be fully separated from the others.

The standards address the following:

- particular learning experiences: "reading a wide range of literature from many periods in many genres"
- skills: "use spoken, written, and visual language to accomplish their own purposes"
- perspectives: "developing respect for diversity in language use, patterns, dialects across cultures, ethnic groups, geographic regions, and social roles"

These standards shape a broad vision of an English department and encourage teachers to create an innovative program while accomplishing these standards.

This book clearly opposes dropping a lesson plan into another context, but rather promoting an

awareness of the particular people and the learning context in order to inspire the teaching process. The author supports moving away from standardized curriculum, both statewide and school-wide, while maintaining a cohesive vision for the purposes of teaching English within the nation, state, and school. In several places, the book models how to work creatively with the tension between fostering responsive innovation in teaching and providing coherence to an English program.

△ *Structural/Systemic Implications*

Schools can evaluate the structure of their English program and consider how well their English department meets the tension between responsive teaching and a unified program.

Many states are in the process of developing standards for subject areas. This book's framework embraces a thoughtful vision while maintaining an awareness of the contextual nature of teaching and learning, and as such, may contribute to a model that unifies vision without mandating materials and pedagogy.

□ *Professional Development Implications*

Depending on what kind of role teachers currently play in designing curriculum, this book can have a wide range of professional development implications. In a school where teaching is stifled by constraints in established curriculum, common texts, or approach, this book's philosophy can open doors to innovation, creativity, and new approaches within the classroom without losing the broader program vision. In schools where teachers actively design and implement their own curriculum, the book's illustrations can serve as a model and stimulate discussion of the benefits of coherence in a program without losing the autonomy that they enjoy in their classrooms.

Most noticeable in this framework is the role of teachers as the key to improving instruction through reflecting on their individual teaching practice. Teachers are valued as creative, caring individuals who have a challenging task in front of them. Empowered with this framework, teachers can serve the essential function of reforming education while being intimately involved in the educational experience of students in the classroom.

◇ *Assessment Implications*

A range of assessment tools apply the NCTE/IRA standards in the classroom. Within the framework and the models contained in this book, teachers can find new methods of assessment and can consider the literacy-building value of implementing such assessments.

The NCTE/IRA standards describe learning experiences, skills, and perspectives encouraged through the study of English. They do not attempt to describe mastery or performance levels for these standards. The next step is to determine student performance indicators for the standards used by individual schools, necessitated by course grades and level promotion. NCTE/IRA holds the position that just as curriculum cannot be dropped in out of context, neither can performance standards be transferred across context. This discussion is best handled within individual schools, where, with the knowledge about the students and particular learning situation, it is more

appropriate to align common vision with performance standards while developing faculty cohesiveness and support.

Taylor, B.M. (1992). Text Structure, Comprehension, and Recall. In S.J. Samuels & A.E. Farstrup (Eds.), *What Research Has To Say About Reading Instruction* (pp. 220-235). Newark, DE: International Reading Association.

Overview of Contents

This chapter defines text structure and its role in reading comprehension and recall. Taylor outlines a number of research-based metacognitive and cognitive strategies that enhance students' understanding of text structures and, consequently, their comprehension and recall of both expository and narrative texts. Text structure is defined as the underlying "building blocks" that organize text patterns in predictable and understandable ways.

Taylor identifies basic types of organizational patterns commonly found in students' textbooks. The five patterns are:

1. Time order
2. Listing
3. Compare/contrast
4. Cause/effect
5. Problem/solution

She notes that text structure also includes "an author's interweaving of main points and supporting details." Skilled adult readers use their implicit knowledge of text structure to help them understand and remember important points of the text. Less skilled readers, including children, do not have this implicit understanding and generally are less able to identify and recall the main ideas in text they have read.

Taylor outlines five cognitive strategies that can be taught to assist readers with comprehending expository text, such as the text found in science and social studies textbooks. The strategies include:

1. Hierarchical summaries
2. Maps
3. Structural organizers
4. Modified SQ3R study procedure
5. Use of headings in textbook chapters

The first three strategies involve writing as a way to improve reading comprehension. Many of these strategies are best taught in social settings, such as reciprocal-teaching models and cooperative groups.

Taylor also describes three strategies that can aid in the comprehension and recall of literary narratives (stories):

1. Story structure questions
2. Story maps
3. Self-questioning

The strategies transcend academic subjects, although some strategies are more appropriate for English language arts classrooms, while others apply more generally in subjects such as science and social studies.

Particular strengths of this chapter are the way Taylor herself uses text structure in her writing, the clarity of the strategy instructional protocols, and the research base from which she draws.

○ *Instructional Implications*

Instruction in text structure can apply to the elementary and secondary school levels. Teachers in all content areas can easily incorporate these strategies into regular instruction by providing appropriate modeling followed by guided practice.

Teachers should be aware of the various text structures that are part of their discipline. They should actively teach the structures and the text features common to their content area to help students use this understanding to learn more effectively.

✧ *Curricular/Program Implications*

These text structure strategies can apply to various academic subject areas. In particular, teachers with other content-area expertise should be willing to adopt strategies rather than relegating the strategy instruction to the English language arts faculty and classrooms.

△ *Structural/Systemic Implications*

The strategies presented here seem to require little in the way of structural change and apparently fit easily into virtually any classroom, providing that the teacher is comfortable with this type of instruction.

▣ *Professional Development Implications*

The chapter itself is a good resource for professional development in two ways. First, the clarity of description makes it easy for teachers to understand how to teach these strategies. Second, in a strategy-instruction workshop where teachers are the students, this chapter can outline strategies for analyzing text structures of both expository and narrative text.

◇ *Assessment Implications*

Primarily, the assessment concerns are implicit and formative in nature. Teachers should give helpful feedback as the students practice each of these strategies. Ultimately, assessment should reveal how much more information students access from their texts when actively using these strategies.

Overview of Key Component D:

Ensure Support, Sustainability, and Focus Through Organizational Structures and Leadership Capacity

Leadership Capacities and Organizational Support for Ongoing Adolescent Literacy Development

The link between ongoing adolescent literacy development and better content-area achievement is clear. However, at this time few systemic literacy initiatives have lasted beyond the planning and initial implementation stages. This may be due to the complex nature of addressing the issue on a school-wide or district-wide level. After all, implementing successful adolescent literacy initiatives requires not only an understanding of the literacy strategies and contexts described under Components A, B, and C of the Adolescent Literacy Support Framework, but also knowledge of secondary school reform strategies, described in Component D.

Educational reform is a multifaceted, synergistic endeavor that demands substantive rethinking about "business as usual." Research points to several features that are critical to sustaining an effective reform initiative. The Comprehensive School Reform Demonstration Project (CSRD) presents one synopsis of these findings. According to the CSRD, successful educational reform must include these nine research-based elements.

1. Effective research-based methods and strategies
2. Comprehensive design with aligned components
3. Professional development
4. Measurable goals and objectives
5. Support within the school
6. Parent and community involvement
7. External technical support and assistance
8. Evaluation strategies
9. Coordination of resources
   (See http://www.lab.brown.edu/public/csr/csrd.taf?function=detail&Layout_0_uid1=CSR00CO).

Awareness of these key elements is useful for planning reform; however, to put these ideas into practice, educators need a deeper knowledge of what specifically supports an adolescent literacy initiative. Implementing and sustaining change requires organizational and leadership structures that are specific to the initiative and take into account how secondary schools work. Without this type of support, restructuring efforts are short-lived. In addition, the lack of systemic strategies and support structures contributes to high levels of teacher frustration, stress, and burnout, especially among those charged with implementing change (Nolan & Meister, 2000).

What It Takes: Some Lessons From School Reform

According to research, successful adolescent literacy programs possess the following elements:

1. Vision and definition
2. Developmental responsiveness
3. Academic effectiveness
4. Access to the world of the written word
5. Organization to ensure success for all

Successful implementation of such literacy programs in three middle school settings showed that all were complex educational interventions. Findings revealed the following specific features:

- a systematically developed approach to address adolescent literacy needs in their particular district
- leadership at the district and administrative levels
- community and school support because of demonstrated success
- coherent educational philosophies that take into account the specific maturational, social, and cognitive needs of adolescents
- incorporation of specific instructional and curricular approaches
- functioning as an integral component of the district's educational program
- ongoing, purposeful professional development for teachers
  (Davidson & Koppenhaver, 1993)

Two additional sets of findings distinguish between high- and low-performing secondary schools. Although not targeted at adolescent literacy initiatives, both studies examined systemic support for language and literacy development.

One study in a secondary school addressed "characteristics of teachers' professional lives that accompany student achievement in writing, reading, and English." According to the study, the more effective schools and districts nurtured a supportive environment by taking the following specific actions:

- orchestrated coordinated efforts to improve student achievement
- fostered teacher participation in a variety of professional communities
- created structured, improvement activities that offered teachers a strong sense of agency
- valued commitment to the profession of teaching
- engendered a caring attitude to colleagues and students
- fostered a deep respect for lifelong learning

These schools also exhibited a variety of organizational support structures: time for teachers to meet and examine student work, clear instructional goals, the use of assessment results, and support for teachers' membership in professional organizations and attendance at conferences. Exemplary administrators provided the resources and scheduling support necessary for reform, encouraged teachers who tried new strategies, maintained an unswerving focus on student achievement, regularly attended meetings, and frequently distributed current resources to their staff. (Langer, 1999b).

The second study examined comprehensive school reform assisting students with limited English proficiency. Effective schools addressed issues in the following six domains:

1. School vision
2. Curriculum and instruction
3. Language development
4. School structure
5. Organizational culture
6. Community relations

(Berman, P., Aburto, S., Nelson, B., Minicucci, C., & Burkart, G., 2000)

This list represents one constellation of intersecting and synergistic elements needed to support success.

In addition, one critical organizational element is the specific assignment of functions and responsibilities to district or school staff. Two districts have recently investigated the research in the area of adolescent literacy and have developed comprehensive plans for systemically addressing the issue. Both plans include careful descriptions of the roles of administrators, teachers, and reading specialists, as well as the organizational support structures needed to ensure successful support of adolescent literacy (http://www.mcsd.org/Report_files/secondary.pdf; http://www.madison.k12.wi.us/tnl/langarts/hsread.htm#commitment).

Embedded in all of the elements of effective school change are certain essential capacities. One is the leadership capacity of administrators and teachers to shepherd the initiative by defining and following through on the tasks associated with effective implementation. Another capacity involves having certain belief structures in place. Administrators and teachers can define and sustain beliefs about the reform process through communicating key messages on all levels, modeling, taking supportive actions, and integrating ongoing professional development that fosters dialogue about those beliefs. Particularly regarding literacy initiatives, the literature emphasizes the need for school staff to believe that struggling readers and writers can succeed and that teachers and schools truly have the power to transform lives (Benard, 1997).

Quality Professional Development

Strategies for success in urban schools have highlighted the importance of ongoing high-quality professional development as part of the everyday life of the school. Research also underscores linking professional development to high expectations for student achievement, ongoing support systems, and regular assessment of program effectiveness (Hodges, 1994).

The quality, structure, and implementation of professional development determines the success of an adolescent literacy initiative. Quality professional development must (1) be linked to goals for student success and (2) continually build professional competence. Many secondary school teachers do not see themselves as experts in supporting literacy throughout the content areas. Therefore, teachers need substantial professional development that addresses how to meet the literacy demands of their content area, how to support reading and writing across the curriculum, and how to effectively use reading and writing to teach and learn. Teachers need opportunities to learn new strategies, develop curriculum, meet collaboratively to improve practice, and mentor one another. Professional development should help teachers find current research, conduct action research, and review program and student success (Hodges, 1994; Joyce, B., Calhoun, E., & Hopkins, D., 1999; Langer, 1999b; Richardson, 2000).

One exemplar is the Strategic Literacy Initiative (SLI), a research-based professional development initiative focused on adolescent literacy (See www.wested.org/stratlit). Over the past 5 years, it has shown demonstrable results in student achievement. The initiative models how to assemble all of the components of quality professional development for content-area teachers in a way that effectively supports literacy development across the curriculum. It also developed an exemplary curriculum for a ninth-grade, academic literacy course that has produced positive results at one high school (Schoenbach, et al., 1999).

Summary of Best Practices

The following best practices describe organizational structures and leadership capacities needed to support a successful adolescent literacy initiative.

The literacy initiative:

- **Meets the agreed-upon goals for adolescents in that particular community**
  Stakeholders need to define what knowledge and skills will allow students in that community to successfully negotiate the literacy demands of (1) course work, (2) higher education, (3) the world of work, and (4) lifelong learning through reading and writing. These four elements are the general goals of the adolescent literacy initiative, along with any goals particular to the school and local community.

- **Articulates, communicates, and actualizes a vision of literacy as a priority**
  For a systemic adolescent literacy initiative to succeed, the school staff must communicate about the goals and structure of the initiative, imparting the message that literacy is a priority throughout the educational program. Furthermore, schools must provide adequate resources to actualize this vision. This level of communication and support signals that the initiative must be taken seriously and supported by teachers, students, parents, community members, specialists, and administrators alike. This is an ongoing task throughout the life of the initiative.

- **Utilizes the best practices of systemic educational reform**
  As discussed earlier, adolescent literacy initiatives require the same practices as comprehensive educational reform. Proven practices are: leadership; support; buy-in from stakeholders; organizational support structures; resource allocation that meets the effort's needs; continuous communication; ongoing professional development; data-driven decision making; participatory decision-making processes; and thoughtful, deliberate review.

- **Is defined in a way that connects to the larger educational program**
  The components of the initiative must be connected to the larger educational program. Isolated remedial classes or pullout programs for language minority students do not impact the general educational program and do not support literacy development for all students. An initiative thrives when there are clear pathways connecting the components of the initiative, an understanding of who is served by what aspects of the initiative, and a consensus on how all types of learners can build the skills and strategies needed to become highly literate.

- **Involves ongoing support for professional development**
  Successful adolescent literacy programs require extensive, targeted, and creative professional development on an ongoing basis. Quality professional development provides opportunities for teachers to learn new strategies, develop curriculum, meet collaboratively to improve practice, support and mentor one another, stay current on research, conduct action research, and review program and student success.

- **Has a clear process for program review and evaluation**
  The strength of an adolescent literacy initiative is in its ability to effectively develop students' comprehensive usage of language (reading, writing, speaking, listening) to learn. To ensure continued success and maximum responsiveness, ongoing assessment procedures should (1) examine outcomes, (2) review program components, and (3) seek participant feedback.

More and more middle and high schools are planning and implementing adolescent literacy initiatives. Applying these best practices ensures that such efforts are solidly based on what the research supports as predictors of success.

Overview of Section

The resources reviewed in this section focus on addressing structural issues inherent in putting the Adolescent Literacy Support Framework into practice on a school-wide or district-wide level, what it looks like, and what challenges need to be addressed. Additional resources can be found in the bibliography. Many excellent links to resources can be found in the Adolescent Literacy in the Content Areas Spotlight on The Knowledge Loom Web site (http://knowledgeloom.org).

Davidson, J. & Koppenhaver, D. (1993). Adolescent Literacy: What Works and Why. Second Edition. Garland Reference Library of Social Science (Volume 828). Garland Publishing Company: New York & London.

Overview of Contents

This book reports the findings of the 3-year, national study entitled, *Project on Adolescent Literacy* (PAL), sponsored by the Center for Early Adolescence, and originally released in 1988. The study developed case studies of successful compensatory literacy programs for young adolescents. Compensatory literacy programs target those students who are lagging 2 to 3 years behind peers in terms of literacy skills, due to ineffective instruction, lack of access to resources, and the need to acquire English as a second language. In this second edition of the book (1993), authors Davidson and Koppenhaver have updated the preface and conclusions to resituate the study within the state of literacy education for young adolescents in the early 1990s. The authors also describe later findings based on studies conducted from 1988 to 1993 that built upon the conclusions of the PAL study.

The preface presents the potential societal consequences of failing to develop literacy skills, typified by stories of many poor adolescents in the United States. Although the attention on the health, educational, and emotional needs of young adolescents in the early 1990s was an improvement from the late 1980s, the authors argue that literacy support still must become a priority.

To develop proficiency in literacy, at-risk adolescents need the following:

1. Instruction that promotes a positive vision of literacy as a meaningful activity
2. Instruction that is responsive to their developmental needs
3. Instruction that is academically effective
4. Access to the world of the written word

The authors discuss each of these criteria as part of a framework for examining whether adolescent literacy needs are being met. Their conclusions are that far too few adolescents receive the support they need, that there is little literacy instruction happening at the middle school level, and that many compensatory programs fail to meet the four criteria cited above.

In the book, the authors describe the methodology of the study, include exemplars of three types of compensatory adolescent literacy programs (in-school, after-school, and summer), and provide cross-program conclusions and recommendations. An annotated bibliography is included.

The authors favor using case studies as "perhaps the only method of capturing and describing the complex of factors that create the environments of successful literacy programs, from program philosophy, instructional techniques, and curriculum to the classroom climate; staff preparation and development; and the organization and administration of the school or agency sponsoring the program."

In the conclusion, the authors assert that successful compensatory adolescent literacy programs are both good adolescent programs and good literacy programs. Successful compensatory literacy programs for young adolescents contain the following five elements:

1. Vision and definition
2. Developmental responsiveness
3. Academic effectiveness
4. Access to the world of the written word
5. Organization to ensure success for all

The three programs highlighted as successful in-school models are all district-wide, systemic initiatives: The Kenosha Model, Academic Improvement Through Language Experience, used in Kenosha, Wisconsin; Structured Teaching in the Areas of Reading and Writing (STAR) used in many elementary and middle schools in New York City's District 4; and High Intensity Language Training (HILT) used throughout the El Paso City School District in El Paso, Texas. All are primarily middle school models (grades 5 to 8), although HILT is formally structured to support ESL instruction through grade 12, if needed.

All three are complex, educational interventions that involve the following:

- a systematically developed approach to address adolescent literacy needs in their particular district
- leadership at the district and administrative levels
- community and school support because of demonstrated success
- coherent educational philosophies that take into account the maturational, social, and cognitive needs of adolescents
- incorporation of specific instructional and curricular approaches
- functioning as an integral component of the district's educational program
- ongoing purposeful professional development for teachers

● *Instructional Implications*

According to the authors, in successful compensatory literacy programs, teachers do the following:

- spend a high proportion of time on reading and writing
- teach skills in context
- stress silent reading
- present explicit reading comprehension strategies
- connect to students' background information and experience
- integrate speaking and listening with reading and writing
- focus on writing
- model frequently as a teaching technique
- use experience-based, involvement activities of students' choice
- facilitate discussions, rather than "leading" them
- organize varied groupings
- value collaborative learning

✦ *Curricular/Program Implications*

The study supports three major conclusions about curriculum.

1. Learning how to read and write well must be valued as a desired program outcome. It must be addressed throughout the middle grades, both on its own and as part of content-area explorations. Authentic reasons to read and write are integrated throughout the educational program.
2. Literacy skills do not depend on specific content. However, the curriculum must not be so content-driven and lock-step that there is no room for student choice or connections to students' interests and experience.
3. Any type of compensatory literacy program must be directly connected to the larger educational program of which it is a part, with many ways to move purposefully from one program to the other to support students, as needed. It cannot exist on its own as a "parallel" program. The goal of a compensatory literacy program must be to give the participants the skills and strategies to succeed in the "regular" program.

▲ *Structural/Systemic Implications*

Administrators must develop and maintain structures to support successful compensatory literacy programs for adolescents. With clear vision and active communication, administrators provide the leadership and understanding needed to scaffold successful programs. Most important is imparting an understanding of how the compensatory program connects to the larger educational program. Administrators must clearly define the program's goals so that teachers understand who may benefit from participating, what the steps are for assessing student eligibility, how students exit the program, and how all of a student's teachers can build upon what the compensatory program provides. The school structure must allow time for teachers within the compensatory program to meet with one another as well as with other colleagues in the "regular" program. The school must offer ongoing professional development and adequate library and technology resources. In addition, administrators must find meaningful ways to involve parents as supporters of their children's literacy achievement.

◻ *Professional Development Implications*

In the study, the successful programs provided extensive, targeted, and creative professional development opportunities. Teachers were able to develop curriculum, meet collaboratively to improve practice, support and mentor one another, stay current on research, and review program and student success.

> The same qualities and values that make good programs so effective for students are the same values and qualities that make them effective for teachers. Respect for the individual's knowledge and professionalism, discussion, modeling, a chance for meaningful participation, and a high degree of "ownership" in the proceedings, are key features of staff development in these programs. (Davidson & Koppenhaver, 1993)

◇ *Assessment Implications*

In their own evolving assessment of programs during site visits, PAL researchers asked the

following questions:

- Are students reading and writing?
- What are they reading and writing?
- Can they talk about the books that they have read and describe the kinds of writing projects that they have completed?
- Are the teachers instructing, not just managing or evaluating?
- Are the students learning, not just complying?
- How do the participants feel about the program?

Because the PAL study defined successful programs as "comprehensive," evaluation of success is necessarily multifaceted and multidimensional. The researchers point out that using any of the assessment measures in isolation could misleadingly identify a narrowly focused program as successful even though it does not improve literacy.

> Comprehensive programs, in contrast, help students improve their skills while providing them with a rich variety of experiences within different literacy contexts . . . In programs that take a more comprehensive view of their mission, students see literacy as more than just getting the right answer or filling in blanks in workbooks. Instead, literacy is viewed as an intrinsically meaningful act of communication. The skills used in one literacy context are applied and integrated into other settings. (Davidson & Koppenhaver, 1993)

The effectiveness of compensatory early adolescent literacy programs must be evaluated by selecting a combination of criteria applicable to a particular program. The assessment criteria are as follows:

- measures of progress on standardized reading tests
- measures of progress in academic achievement on standardized tests in at least one subject area, such as social studies or science
- documentation that students are reading more
- powerful anecdotal evidence that goals are being met
- measures of progress on tests developed to evaluate the program's own stated goals (criterion-referenced tests)

Additional Notes

This study focuses primarily on middle school initiatives. Despite being written almost 15 years ago, its conclusions remain current and in concert with those of later research.

O'Brien, D.G., Stewart, R.A., & Moje, E.B. (1995, July/August/September). Why Content Literacy is Difficult to Infuse Into the Secondary School: Complexities of Curriculum, Pedagogy, and School Culture. *Reading Research Quarterly*, 30(3), 442-463.

Overview of Contents

This article examines the failure of content-literacy strategies to become accepted into the

philosophy and practice of the contemporary high school, despite the evidence that these strategies enhance reading comprehension. The article begins with a review of the roots of content-literacy instruction in cognitive psychology experimental research, which treated the setting as a neutral factor in the success of the intervention. Critically examining this research, the authors O'Brien, Stewart, and Moje argue that the failure to adopt content-literacy strategies is due to lack of attention to the complexities of high school culture, curriculum, and pedagogy.

The article is divided into three major sections:

1. Views on content literacy
2. The complexities of secondary schooling
3. Alternatives to the infusion model

Content literacy can be viewed in two rather contradictory ways. The first sees content literacy as a technical auxiliary to typical content-area teaching. In this infusion model, teachers are supposed to teach content-area literacy strategies within their teaching of a particular subject. The second viewpoint is that content-literacy strategies are a contemporary challenge to the teacher-directed, top-down structures in high school classrooms. These strategies promote the students' ability to direct their own learning with teachers as facilitators, not dispensers, of knowledge. The authors claim that both visions of content literacy are flawed because of the failure to understand the complexities of high school curriculum, pedagogy, and culture.

High school practices are based on a set of assumptions and beliefs about teaching and learning. According to the authors, these concepts are rooted historically and socially in positivism and technical rationality, theories which maintain that knowledge can be quantified, verified, and disseminated by experts. Applying these theories to education, learning becomes arbitrarily controlled through a logical pedagogy locked to a set of cultural norms. The curriculum is based on artificial distinctions between disciplines, and texts are a principal tool for controlling learning. Rigid structural frameworks reinforce a pedagogy whereby teachers direct students in linear and unvarying sequences. Under this absolutist rationality, the meaning of a text is fixed, and students' backgrounds and experiences are immaterial. Furthermore, in a pedagogy dominated by control, teachers talk at passively receptive students. Because of the "scientifically managed" approach to the school program, content literacy competes for time in a context where "coverage" is valued most.

In contrast, content-literacy strategies are rooted in social constructivism. Applied to education, social constructivist theories define school culture as a construct of beliefs, values, and ways of acting among individuals who negotiate within the culture and therefore alter it. For example, if students are actively negotiating their own understandings, multiple readings of text emerge, as opposed to the fixed interpretation or "truth" embedded in the text or the teacher's lesson. Thus, the social constructivist viewpoints inherent in content literacy threaten the current positivist system.

The authors suggest a new research agenda for content literacy negotiated inside the actual high school environment. This agenda is formed by multiple theoretical perspectives, including anthropological perspectives, hermeneutic phenomenology, and textual stances, such as the ways that readers make connections between texts. Instruction is not a technical set of processes to convey the curriculum, but an ongoing dialog within a dynamic context. Curriculum is not a neutral body of knowledge, but a historical, social, and political construction.

In contrast to the infusion model's assumption that content-literacy instruction can be technically

incorporated into a neutral high school context, the author's alternative model recognizes the dynamic interaction between high school culture and the participants within that context. The authors propose sensitizing preservice teachers to teaching in the existing culture inside the school and working with in-service teachers to reflect on their own assumptions and roles in perpetuating the rigid, top-down underpinnings of the high school. Suggested methods for the sensitizing process include autobiographical reflections on teachers' beliefs and values, dialogue between students and college faculty on these issues, readings in content-literacy courses, teaching cases, field experiences, and ethnographic writing.

The authors assert that the infusion model of content literacy is flawed because of the researchers' lack of understanding about the nature of the contemporary high school. If research-based innovations are to succeed, researchers must enter into a dialog with high school teachers and administrators in ways that minimize constraints and maximize possibilities. Research and practice need to reciprocally inform each other.

● *Instructional Implications*

Pedagogy is one of the main foci of this article. In the positivist view that dominates the current high school, teaching is essentially a process of transmission from experts (the text authors and teachers) to passive, neutral receivers (students). Social constructivism, the basis of content literacy, is incompatible with the teaching currently practiced in high school classrooms. Content-literacy strategies involve building upon the students' background knowledge, encouraging active participation, and eliciting multiple interpretations. As such, content-literacy strategies not only reflect a shift in control, but also confront the cultural assumptions underpinning the dominant pedagogy.

✦ *Curricular/Program Implications*

The authors define curriculum in present-day high schools as explicit bodies of knowledge, artificially divided into content areas (disciplines) based on a hidden set of values, expectations, and routines. Because curriculum is an implicit set of historically situated and socially constructed understandings relating to the educational goals of schools, it reflects the societal values of American culture. The rational organization of secondary schools mirrors understandings of learning at the beginning of the twentieth century. The division of curriculum into disciplines implies that knowledge can be objectified, verified, and disseminated by experts. However, according to more contemporary perspectives drawn from critical, social, semiotic, and socio-linguistic theories, disciplines are artificial constructs that empower certain forms of discourse as superior to others in values, priorities, and power. Recent research on active cognition in learners conflicts with the dominant high school curricular structure. Yet, the current pedagogy persists and undermines attempts to infuse content literacy into the high school curriculum by devaluing the active engagement of learners as interpreters of texts.

△ *Structural/Systemic Implications*

Culture is at the heart of high school structures and systems. Teachers negotiate within the school culture to gain power and therefore participate in the technical rationality that forms the

structure and systems. Teachers compete within the system for resources, more able students, smaller classes, and administrative recognition. Content literacy is seen as an intrusion and competitor for those resources, as well as a fundamental challenge to the norms and values of the high school culture. In contemporary high schools, students are relatively powerless. Pedagogy and curriculum are "done to" students, and student engagement is predicated on potential pay-offs, such as grades and social status. From a critical, socio-cultural perspective, the high school system and structure are reifications of American capitalist culture with competition for power and resources dominating the actions of participants at all levels.

■ *Professional Development Implications*

Professional development for in-service and preservice teachers is one way to change high school curriculum, pedagogy, and culture, allowing content literacy to become accepted. Social constructivism itself forms the basis of the professional development. The authors advocate that teachers need to examine their underlying assumptions about teaching and learning, as well as their roles and those of students. Professional development should be based on active interaction and interpretation using techniques including: autobiography; dialogue; reading theory and research (rather than how-to pedagogical work); examining various teaching cases; and ethnographic writing. Working collaboratively with researchers is another method of professional development that promotes content literacy and enables teachers to examine their roles within the power structure of the contemporary high school.

◆ *Assessment Implications*

Although not specifically discussed in this article, the implications for assessment strategies and practices are parallel to the issues surrounding curriculum and instruction. In a positivist perspective, assessment is a means to sort, judge, monitor, and track. These uses of assessment are not valuable in a system that promotes student empowerment, interaction, and active engagement. By contrast, in a social constructivist perspective, assessment is a means of reflecting on one's work and is a source of information on which to base decisions about how to gain desired knowledge and skills. Assessment should support dialogue about teaching and learning, as opposed to closing it down, as is often the case. Students should have choices about how they want to demonstrate their knowledge and skills and help establish the criteria by which to document progress.

Additional Notes

This is an extremely dense and challenging article that assumes some knowledge of critical theory and the contemporary challenges to empirical research in cognitive psychology and educational practice. Although the article does not serve as a day-to-day practical resource for teachers, the theory it presents is a valuable challenge to many hidden assumptions underlying daily practice in most high school classrooms.

Peterson, C.L., Caverly, D.C., Nicholson, S.A., O'Neal, S., & Cusenbary, S. (2000). Building Reading Proficiency at the Secondary Level: A Guide to Resources. Southwest Texas State University: SEDL.

Overview of Contents

This guide outlines resources for programs and strategies that help weak readers at the secondary school level "come up to speed." Peterson and her colleagues investigated the research related to helping struggling adolescent readers. The focus is on effective remediation, as opposed to ongoing literacy support, although certainly many of the programs and strategies fulfill that role as well. While selecting the resources, the authors honed in on those factors for which "a research base establishes essential importance and for which there are pedagogical implications." This guide identifies programs and strategies that align with those factors and have a track record of success with adolescent readers.

The first part of the guide supplies background information on reading proficiency at the secondary school level. An overview outlines the scope of the problem and the consequences of being a struggling adolescent reader. The authors present common reading behaviors of struggling readers, along with informal assessment tools for teachers to use. A synthesis of the theory and research on reading at the secondary school level is organized by four major factors for building reading proficiency: (1) motivation, (2) decoding skill/fluency, (3) language comprehension, and (4) transaction with text. Each section of the synthesis considers implications for English language learners. Finally, the authors discuss principles of effective reading instruction and professional development.

The second part of the guide details the programs and strategies available for teachers to use with struggling adolescent readers. Programs are defined as "instructional packages of multiple components prepared by an entity, often commercial." Materials, instructional routines, and support for the professional development are included. The authors distinguish between campus programs (which require an administrative commitment and implementation across multiple classrooms on a district-wide, school-wide, or department-wide basis) and classroom programs (which can be implemented on an individual basis by teachers). The programs reviewed are: Accelerated Reader(AR)/Reading Renaissance, Benchmark Word Detectives Program, First Steps, Multicultural Reading and Thinking (McRAT), Project CRISS, READ 180 Program, Read RIGHT, Reading Power in the Content Areas (RP), Strategic Instruction Model (SIM), Student Team Literature (STL), and the Wilson Reading System (WRS).

The authors also distinguish between teacher strategies and student strategies. Teacher strategies are implemented by teachers to improve student reading ability. They may include whole class, small group, or individual approaches. Student strategies are "internal procedures used by students in the process of reading." Fifteen teacher and student strategies for supporting struggling adolescent readers are covered: background knowledge strategies, collaborative strategic reading (CSR), dictated stories/language experience approach (LEA), fluency strategies, generative vocabulary strategies, independent reading strategies, KWL Plus strategy, literature-based reading instruction, reader response strategies, reading guide strategy, reading workshop approach, reciprocal reading strategy, text mapping strategies, vocabulary and concept mapping strategies, and word analysis strategies.

Descriptions of these programs and strategies include how each develops reading proficiency, the research that supports that its effectiveness, implementation information, selection criteria, and contact information.

● *Instructional Implications*

The authors outline eight research-based principles of effective reading instruction:

1. Recognition and honor of cultural and linguistic diversity
2. Assessment during teaching
3. Scaffolds before, during, and after reading
4. Repertoires of strategies
5. Explicit instruction of strategies
6. Reading practice
7. Student choice and authentic tasks
8. Scaffolding across the classroom curriculum

Many of the strategies presented meet these criteria, as do several of the programs. Conducted concomitantly, they comprise best practices, but often a strategy or program does not focus on identified needs at a particular site or of a specific population. Strategic planning entails using this list as a criteria for choosing approaches to support student reading abilities and, therefore, content-area learning. Teachers need to identify which strategies and approaches meet each of these criteria in their particular classroom when used on a regular basis as part of content-based instruction. This implies that teachers need to be aware of the consequences of not employing the strategy in a complete approach. In addition, this section covers how to design an effective secondary pullout remedial program, including English as a second language (ESL).

✦ *Curricular/Program Implications*

Fifteen sets of strategies and 11 programs are reviewed. Each has specific programmatic implications, which affect what happens in classrooms. Because the priorities of the programs differ, the programs need to be matched carefully with identified goals at a particular district or school. Some of the programs are more appropriate when limited to smaller remedial settings, while others are designed for content-focused classrooms or English language arts classrooms.

▲ *Structural/Systemic Implications*

Structural implications vary depending upon which programs and strategies are adopted. However, some strategies require particular support: for example, Accelerated Reader requires access to computers; Student Team Literature, a wider variety of materials; Multicultural Reading and Thinking, thematic planning. All demand larger blocks of time structured into the school schedule. Administrative support, time, and resources must be allocated for effective professional development.

■ *Professional Development Implications*

The authors summarize the research on how professional development helps teachers to implement

new instructional strategies. Effective professional development contains the following:

- continuous and sustained learning, including workshops over time, peer mentoring, and coaching
- locally based initiatives, such as teacher study teams, online professional development support, and a focus on how to develop and sustain professional learning communities
- adaptation rather than adoption of programs
- teacher as researcher, including the carrying out of action research as a part of teachers' professional development

The recommended programs and strategies push professional development and teacher evaluation in new directions. All teachers need to take responsibility for student literacy. Currently, many content-focused teachers assume struggling students will fail or place them under "remedial jurisdiction," thereby removing themselves from responsibility for the students' success. This is mostly due to a lack of effective strategies and support. However, if district-wide, campus-wide, or department-wide programs and strategies are adopted, professional development must extend beyond training. Administrative leadership is critical in establishing this as a priority.

◆ *Assessment Implications*

By implementing these programs and strategies successfully, assessment should reveal a higher level of reading ability and a higher level of content understanding. Therefore, program success can be measured by student outcomes in the content areas.

Additional Notes

It is important to note that evidence of the programs' success is limited. Several of the programs are relatively new and, while based on research, have not been independently evaluated. Others show evidence of success limited to improved reading gains but not connected to higher academic achievement. This underscores the lack of research on reading support structures at the secondary school level. However, since the programs and strategies presented are based on what is known to be effective, the authors extrapolate that these are important resources to consider.

Schoenbach, R., Greenleaf, C., Cziko, C., & Hurwitz, L. (1999) Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms. San Francisco: Jossey-Bass.

Overview of Contents

This well-written and informative book elucidates the reading apprenticeship approach developed by the Strategic Literacy Initiative. The approach is well-grounded in research about schema theory, sociocultural theories of learning and literacy, metacognition, cognitive apprenticeships, and a range of comprehension strategies. In this book, Schoenbach and her colleagues present

multiple scenarios of teaching and learning in both academic literacy classes and content-area classrooms. In this approach, teachers assume the role of "master readers" inviting students to see themselves as "developing readers." The classroom becomes a place to discuss texts, play and struggle with texts, share strategies and successes, and develop expertise as a reader and a writer within a community of readers and writers.

The book is divided into three sections:

Part 1: Confronting the Problem of Middle and High School Reading
Two chapters present an overview of the challenges to improving adolescent literacy and outline the comprehensive framework on which the authors' work is based.

Chapter 2, "The Reading Apprenticeship Framework," describes the heart of the approach. The authors offer a well-crafted description of the reading apprenticeship framework, which they have used to develop an academic literacy course and have infused into the content-area classroom with impressive results. The reading apprenticeship approach is grounded in the work of Russian psychologist L. S. Vygotsky, who viewed children's cognitive development as socially mediated. According to Vygotsky, children learn by participating in activities with "more competent others" who provide support for parts of a task that learners cannot master by themselves. The "more competent others" determine the level of support they provide to the learner, encouraging the learner to take on more of the task over time. The learning environment thus created supports learners and challenges them to grow.

Part 2: Reading Apprenticeship in the Classroom
Six chapters describe how to help students develop academic literacy; how to motivate readers; how students acquire cognitive tools; how to build context, text, and disciplinary knowledge; how to implement the reading apprenticeship approach in subject-area classrooms; and how to overcome obstacles to implementation. The strategies are illustrated by diagrams, definitions, quotes from students, samples of student work, descriptions of protocols, key points, and illustrative scenarios.

Part 3: Beyond the Classroom
Two chapters address professional development implications and the issues involved in developing school-wide reading apprenticeship programs.

According to the authors, reading apprenticeships help adolescent readers assemble a repertoire of activities for reading comprehension. The authors assert that struggling adolescent readers benefit from seeing the reading process demystified. Young people who struggle with reading need to see what happens inside the mind of a proficient reader, "someone who is willing to make the invisible visible by externalizing his or her mental activity."

The authors present four key dimensions of classroom life necessary to support adolescent literacy:

1. Social dimension, a psychologically safe environment for students to be open about their reading difficulties
2. Personal dimension, the students' self-awareness as readers and their goals for reading
3. Cognitive dimension, the developing mental processes of the readers
4. Knowledge-building dimension, the knowledge readers bring to a text

The four dimensions naturally interact. Dialogue is the central process by which teachers and students think about and discuss their personal relationship to reading, the social environment

of the classroom, their cognitive activity, and the knowledge required to make sense of text.

This book offers a systematic guide to designing a reading program based on the reading apprenticeship framework. Curriculum development specialists, administrators, and classroom teachers can appreciate the well-written philosophical overview supporting the model. School districts interested in implementing a reading apprenticeship program can benefit from the thorough review of the authors' work. The book is a valuable resource for teachers, administrators, professional developers, researchers, and parents interested in learning about this approach to addressing adolescent literacy.

◐ *Instructional Implications*

The reading apprenticeship framework implies a significant shift from a teacher-directed to a student-centered classroom. It requires a willingness to embed the research-based strategies on a regular basis into content-area instruction or academic literacy courses. It involves a close examination of the purposes, processes, and assumptions of both teachers and students. The social, personal, cognitive, and knowledge-building dimensions described also impact daily classroom instruction. The class time required for metacognitive processing and dialogue about how one learns can significantly alter the rhythms of teaching and learning.

✧ *Curricular/Program Implications*

The foundation of the reading apprenticeship approach is establishing safe places and learning communities, without which growth and development cannot occur. Time and energy must be invested into creating cultures where this type of teaching and learning can happen. Teaching and practicing cognitive strategies also take significant time and energy. While the benefits are well worth the effort, the approach necessitates rethinking the concept of "content coverage," reformulating the curriculum, and restructuring time use toward the priority of developing literacy skills.

△ *Structural/Systemic Implications*

The reading apprenticeship approach changes the roles of teachers and students. On both parts, resistance is likely yet remedied by informing and preparing teachers to facilitate a reading apprenticeship classroom and to build enthusiasm and confidence among students. Structurally, to embed the reading apprenticeship approach into subject-area classrooms, school staff must re-evaluate time use and resources and clearly delineate the expected learning outcomes on content-area texts. Perhaps even more challenging is the necessary commitment on the part of teachers to change the cultural norms of the classroom. For this approach to be successful, students must feel genuinely validated, their tentative steps and risks supported and recognized. Teachers must also be willing to share differently from the typical teacher-student relationship. Without these cultural shifts, it is unlikely that significant outcomes will occur.

Developing school-wide reading apprenticeship programs involves a significant buy-in from teachers and administrators. A school-wide initiative cannot succeed if it involves only a stand-

alone, academic literacy course or is infused into only a few content-area classes. The authors offer suggestions on how to develop interest and support, a resource base, professional knowledge, and administrative scaffolding for a successful reading apprenticeship initiative. Library resources in the classroom and the school serve an essential function in literacy development. Schools must provide resources and time for teachers to meet and engage in collaborative inquiry, problem solving, and curriculum development. The role of administration as knowledgeable supporter is key.

■ *Professional Development Implications*

The authors describe the need to create communities of master readers:

> As in any apprenticeship, in a reading apprenticeship, success depends in large part on how well the master understands and can articulate and demonstrate his or her craft, in this case, making sense of text. (Schoenbach, 1999)

The challenge is for content-area teachers to realize that they are experienced readers who have the resources to support student reading. The vehicle for this realization, according to the authors, is for teachers to meet and engage in collegial inquiry. Teachers must learn how a reading apprenticeship works by engaging in inquiry about how they solve reading challenges themselves, how they use cognitive and metacognitive strategies, and what they are anxious about when confronted with complex texts outside their area of expertise. Gaining insight into one's own reading comprehension processes, listening to others describe their reading practices, and investigating others' expertise, all "yields a deeper and more integrated knowledge of how people make sense of text." This, in turn, allows teachers to listen more critically to external suggestions, understand clearly the feedback from students, and make sounder judgments regarding text selection, instructional strategies, and assessment.

To gain expertise and insight, the authors suggest a series of exercises and strategies for teachers to try and discuss together. The authors maintain that inquiry-based professional development has a profound impact on the thinking of participants. They cite such outcomes as changing (1) the way teachers understand reading, (2) the ways teachers see and hear students, (3) the ways teachers see and describe their role, and (4) the ways teachers see themselves as readers.

◆ *Assessment Implications*

According to the authors' research, students who actively participated in reading apprenticeship classrooms changed their perceptions of themselves as readers, improved their literacy skills as shown on standardized tests, and increased their ability to be successful in content-area classrooms.

Conclusion

Through words — written, spoken, and read — we give permission, we travel, we forgive, we explore, we expose, we convince, we celebrate, we grieve, we grapple with ideas, we pass on traditions, we connect across space and time, and we come to a better understanding of ourselves and our worlds.

Conclusion

Literacy support and development cannot be optional at the secondary level. It is not an elective "add on" to the responsibilities of secondary school educators. If we truly believe in excellence and equity in education, literacy support and development must be part and parcel of what we do. When working hard toward the necessary changes for improving literacy, it is easy to forget how essential language is to shaping who we are and who we can become. The challenge is daunting, and the alchemy of change is difficult to actualize. However, we must recognize the imperative to be successful and the grievous consequences should we fail.

When I began reviewing the research on adolescent literacy support and development, I expected to find much more conflict about what we know. I expected to find hesitant recommendations and contradictory advice. Instead, I found resounding agreement across research communities about what is effective and what needs to be done. The fact remains, however, that not much has changed in the past decade in terms of typical classroom practice. One problem has been a lack of awareness about what the research says. Making the research accessible seemed to be the missing link.

However, as I read, talked, observed, and listened, I understood that there were more barriers. Beyond the inaccessibility of the research, few exemplars existed and educators had limited understandings about how the findings translated into effective classroom practice and important shifts in school culture. There still is confusion about how literacy support relates to standards-based reform; yet, literacy is connected to the very fabric of teaching and learning for understanding. And there is fear — fear of not knowing what to do, not doing it "right." In many cases, the result has been to not do anything at all. To direct support toward real issues in practice, resources must target these barriers.

To put research into practice, secondary school educators need assistance in sifting through research-based recommendations and making informed action plans for literacy development and support at the district, school, departmental, and classroom levels. This need was the impetus for developing the Adolescent Literacy Support Framework and other resources, such as the Adolescent Literacy in the Content Areas Spotlight on The Knowledge Loom Web site (http://knowledgeloom.org), and this book.

This is, necessarily, a collective effort. These resources are mere pieces, along with all of the other pieces — policies, finances, discussions, initiatives, programs, workshops, materials, research — currently being put into place across the country. All of these efforts build and rely upon one another. The strength of our individual efforts multiplies if we continue to collectively communicate, problem solve, and focus on this critical area.

It is no exaggeration to say that literacy is at the heart of expressing our humanity. When oxygen levels are too low, we cannot breathe; similarly, when literacy levels are too low to sustain a democratic society, we are all in danger. It is difficult for many to imagine making substantive changes in traditional and resistant structures such as those found in many middle and high schools. With so much at stake, however, it behooves us to find the collective will to do what we know needs to be done — and thereby make room for the magic that will flow from our efforts.

- Julie Meltzer

Bibliography of Adolescent Literacy Resources

Bibliography of Adolescent Literacy Resources

This bibliography of adolescent literacy resources includes specific citations for resources reviewed in this book as well as additional examples of relevant research. All of the selected resources clarify the links between research and practice. For those charged with supporting ongoing adolescent literacy support and development, this bibliography provides a comprehensive overview of what we know and how it translates to teaching and learning.

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* Denotes a recent publication of practical value to teachers and professional developers

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Acknowledgements

For their substantive roles in developing the annotated reviews, my appreciation goes to Nancy Cook Smith (Notre Dame College) and Holly Clark (Maine Public Schools). For their feedback and comments on this and earlier drafts, my thanks go to Eileen Landay (Brown University), Karen Rumery (Maine Public Schools), and John Nori (National Association of Secondary School Principals). For their ongoing support of the Secondary Literacy Project, I want to thank Sidney Okashige, Mary Anne Mather, Stephanie Feger, Joe DiMartino, Patti Smith, Cynthia Way, Kristin Latina, and members of the SCL Group at the LAB at Brown University. I am grateful for the outstanding support received on this project from Mary Ann Lachat, Marty Williams, Elaine Millen, Martha Cray, Steve Smith, Barbara Hoppe, Lynn Wronkowski, Erin Stewart, and all of my other colleagues at the Center for Resource Management, Inc., without whom it would be impossible to do this quality of work. Many thanks also to my family, Jonathan, Jacob, and Jasmine, for all of their patience and understanding through many late nights, early mornings, and parts of weekends working toward deadlines. Lastly, I am deeply appreciative of educators throughout the country for doing the hard work it takes to truly understand and provide support for adolescent literacy development. Together we can make the critical difference.

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